DOCUMENT RESUME

ED 098 293 CE 002 340

TITLE	Career Education: Leadership in Learning.
INSTITUTION	Arizona State Dept. of Education, Phoenix.
PUB DATE	[73]
NOTE	35p.; The photographs illustrating this document will reproduce poorly
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	Board of Education Policy; *Career Education; Educational Innovation; Educational Objectives; *Educational Philosophy; Elementary Education; *Projects; Secondary Education; *State Programs; Vocational Development; *Vocational Education
IDENTIFIERS	*Arizona

ABSTRACT

An overview is offered of the Plan for Arizona's Career Education, a 10-year career education program developed by the Arizona State Board of Education. The handbook includes a definition of career education, the elements of career education, program organization, teacher support, impact on counseling, a description of the Arizona Clearinghouse in Career Education, apprenticeship programs, career-oriented curriculums, parent involvement, and the use of instructional media. Briefly discussed are the 20 career education projects currently underway in various school districts in Arizona. Vocational education is an important part of the career education program of the Arizona Board of Education. The various vocational education programs include home economics, marketing and distribution, public and personal services, agribusiness and environment, manufacturing and transportation, communications, construction, business and office, health, and such special areas as manpower development, special needs, cooperative education, exemplary programs, Research Coordinating Unit, work study programs, professional development, youth organizations, and area vocational centers. The document is introduced by remarks by Dr. William F. Pierce and Dr. Sidney P. Marland, Jr. (BP)

BEST COPY AVAILABLE

ED 098293

CE002 340

CAREER EDUCATION

LEADERSHIP IN LEARNING

the 3R's- plus CAREER EDUCATION

GREAT SEAL OF THE STATE OF ARIZONA 1912

ARIZONA
DEPARTMENT OF EDUCATION
W.P. SHOPSTALL, PH.D. SUPERINTENDENT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"...withstanding the test and strain of change..."

BEST COPY AVAILABLE

By Dr. Weldon P. Shofstall
State Superintendent of Public Instruction

From a personal viewpoint, Career Education is one of the most exciting things I have been involved with in my professional career. I feel buoyed and excited with the progress made so far and am unabashedly delighted with the prospect that Career Education is providing the needed vehicle for reforming an educational system long in need of change.

We are now well into our second year of Career Education in Arizona and are looking ahead to our third. Refocusing the entire system of education cannot be accomplished overnight, yet much has already been done. Nevertheless, even more remains to be done in the years yet remaining in this decade.

Career Education cannot just happen haphazardly. That would be wasteful and eventually futile. A plan must be formulated and guidelines established. With that in mind, I am pleased to note the formulation of a Career Education Task Force, whose purpose was to develop a plan for the implementation of Career Education in Arizona through 1980.

When it first met in November of 1972, the Task Force (known as Project PACE--Plan for Arizona's Career Education) established six objectives. In broad terms, the six outcomes are:

1. Develop a state Career Education matrix which will be flexible, concise, understandable, and locally-owned.
2. Develop a 10-year plan with specific outcomes through 1980 and guidelines for project participation during FY 73-74.
3. Develop a review and evaluation system for all locally-developed Career Education materials.
4. Provide guidelines and direction for continuation proposals from each state project.
5. Develop appropriate Career Education information materials for community leaders throughout the state.
6. Complete 14 one-day workshops, one in each geographical area of the state.

The work of Project PACE has been extremely heartening. The Arizona State Legislature took the national lead when it passed Senate Bill 5 in 1971 and demonstrated a firm commitment towards achieving an educational system built around the concepts of Career Education.

Having a 10-year plan will be an invaluable aid in accomplishing our mission--a mission which, when accomplished, will have reaffirmed faith and reliability in a system that will have withstood the test and strain of change. We are investing the taxpayers' dollars wisely and judiciously. The taxpayers and communities of tomorrow will be the benefactors. The determination to prepare today's students for rewarding and productive lives in tomorrow's world is a mighty challenge. With the concept of Career Education, we are meeting that challenge head on.

BEST COPY AVAILABLE

Hello . . . My Name Is Career Education

Published by the Arizona Department of Education (in cooperation with the State Advisory Council for Vocational Education), 1535 West Jefferson, Phoenix, AZ 85007.

Weldon P. Shofstall, Ph. D. . . . . Superintendent

Eugene L. Dorr . . . . . Associate Superintendent for Career and Vocational Education

Robert E. Golden . . . . . Public Information Officer

John Banks . . . . . Artist

Quantities of this publication are not available for sale. However, additional copies may be requested by writing to "Career Education" at the above address.

Teaching Career Education concepts in Arizona's schools really began decades ago--which is to say, of course, that much of what Career Education embraces today has been going on for years. Career Education is not a brand new discovery or a grand design for replacing the existing system of education. Rather, it is an idea for REORIENTING the existing system of education so that it relates to the world of work and so that it responds to the needs of today's more sophisticated and perceptive students. Tomorrow's adults must be prepared and equipped to lead productive, happy, and fulfilling lives.

Career Education, as a broad concept aimed at breathing fresh new life into the formal education process, INCLUDES academic education, vocational education, college preparation, adult education, special education, and much more. In Arizona, Career Education technically began in 1971 when the State Legislature passed a bill and appropriated almost $2 million to begin pilot projects around the State. Thirteen projects were selected during the 1971-72 school year. Each was unique and different in its approach towards achieving the goals of Career Education.

With a 1972-73 legislative appropriation of $3.8 million, the Department of Education funded 20 Career Education projects to further examine various means of fusing the idea of Career Education into the educational system. This publication is an effort to explain Arizona's interpretation of Career Education and to highlight the major activities.

BEST COPY AVAILABLE

How Much Do You Know About Me?

(True–False)

Circle the "T" or "F" preceding each of the following statements.

T F Career Education is another term for Vocational Education.

T F Career Education is trying to steer first-graders into making a career choice.

T F Career Education is trying to discourage college enrollment.

T F Career Education is primarily for minority groups or disadvantaged youth.

T F Career Education is a newly-developed textbook.

T F Career Education spells the doom or decline for Vocational Education.

T F Career Education is an attempt to pre-empt local control over education activities.

T F Career Education is just for elementary students.

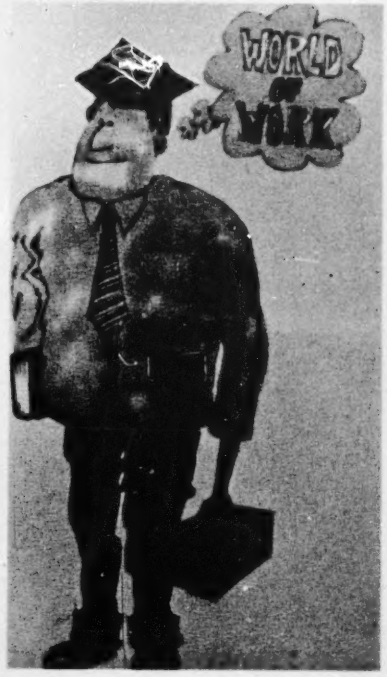
T F Career Education doesn't involve music and Physical Education teachers.

T F Career Education doesn't apply to the student who wants to become a doctor.

T F Career Education is a passing fad -- here today, gone tomorrow.

T F Career Education is a vehicle for making classroom instruction meaningful and important for every student.

You have completed the test, and hopefully, will not be shocked to know that only the LAST statement is true. All the others are false. If you did not score 100 percent, there are some things you need to know about Career Education. Please read on. Regardless of whether you had a perfect score or not, you should be better informed about Career Education in Arizona by the time you get to the back cover.



BEST COPY AVAILABLE

I Am Truth And Beauty, As Well As Work

(NOTE: The following is an abridged version of a speech delivered by Dr. Marland in November, 1972 to the Conference on English Education in Minneapolis).

By Dr. Sidney P. Marland, Jr.
Assistant Secretary for Education
Department of Health, Education and Welfare

Career Education is essentially an instructional strategy, aimed at improving educational outcome by relating all teaching and learning activities to the concept of career development.

We conceive of Career Education as beginning in kindergarten or first grade. Until the sixth grade, there would be no attempt to TRAIN students. All we are aiming at in these early years is developing an awareness of careers, a personal realization that each student will spend most of his or her life doing or being something -- and that "something" will be largely determined by work. WORK may or may not carry economic motivations -- but it is seen as the product of useful living. Our goal is that during the last four years of schooling -- the ninth through twelfth grades -- every youngster will develop entry-level job skills that will qualify him for employment upon leaving school, WHENEVER he leaves.

I repeat, EVERY youngster -- including those who intend to go on to college or some other form of post-secondary education. If, by tenth grade, a girl has decided that she wants to take a Ph.D. in molecular biology, fine; not only are we for her, but we stand in awe of her knowledge of what the words mean. Recognizing the uncertain nature of life and the changeability of young minds and spirits, however, we want to give her a fallback position if her plans don't work out -- to make sure that she can qualify for a good job even if she leaves high school BEFORE graduation.

The result will be better preparation for whatever path the student chooses to follow after leaving high school, or after high school graduation. He can get a job. He can enter a technical institute for more intensive, specialized preparation for a career. Or he can enter a four-year college -- and with a much better sense of direction than most young adults bring to college today.

It is well past time for our educational institutions to help eliminate prejudice based on work -- to overcome the idea, passed on to us by our own parents, that some jobs are worthy and some are not, that some family heads are to be respected and others scorned, and that the best way to tell the difference is to see whether the wage earner owns a college degree or wears a tie to work.

Learning from educational experiments of the past, we do not believe that a few snappy slogans and some Federal money can accomplish any serious educational reform. We have a staggering amount of thinking, experimentation, and refining to do, and probably a distressing number of mistakes still to make.

Career Education need not spell the "Death of Intellect in the West." It will still be possible for a student to pursue truth and beauty, not to mention syntax and composition, without first investigating how much it pays per hour. Believing that nobody over 21 will pay any attention, we have vainly and self-destructively repeated unexamined formulas: "The liberal arts do not teach one how to make a living...they teach one how to live." What awful nonsense.

Knowledge is NOT its own end. If it were, there would be no qualitative difference between reading Toynbee and reading the World Almanac. Both convey knowledge, but the manner of the conveyance is the difference between a towering intellectual performance that lifts the spirit and commands admiration, and a compendium of facts that occasionally comes in handy.

There is a saying from the Talmud that goes like this: "When you stop working, you're dead." As I interpret it, this does not mean that the foreman will shoot if you lay down your shovel, or the Superintendent will frown if your daily planning book is awry. It means, rather, that when you stop working at yourSELF, when you regard yourself as a finished piece of goods with no prospect of growth or surprise or becoming, then you are indeed, as the advertisement says, "dead at 30, retired at 65." Work, in other words, has a central position in the fashioning of a satisfactory human life, and I hold this to be true especially for those who dare to teach the young!

Humanists must lend a hand in reinterpreting for our society the vital significance of work for man and its place in any modern conception of education. We have acquiesced in a cynical perspective that views work as something we put up with between nine and five so we can do what interests us after the plant closes down. At its worst, work is a dreary, painful chore. At its best in our society work is an opportunity for self-exploration; at its best, work IS a humanity -- and we have the chance to help our youngsters approach work as their intellectual and personal fulfillment.

Your Elected Representatives Like My Ideas And Ideals

BEST COPY AVAILABLE

By Senator Ray Rottas
Arizona State Senate

As a legislator and an aware citizen, I am concerned with the high dropout rate in our schools. This dropout rate appears to be related, at least in part, to a deficiency in basic relevant skills and the general lack of an entry-level marketable skill among students at the end of their education. These observations suggest the need to make our educational system more responsive to the current and projected labor market. Schools are simply not meeting the challenge of giving the majority of students an education which will enable them to make sound decisions in choosing an occupation or profession.

In response to this problem, the Arizona State Legislature, in 1971, provided funds for thirteen pilot programs as the beginning of a Career Education effort. The Legislature felt that aggressive action needed to be taken to help educators develop the Career Education concept of combining academics with the working world and presenting them to students as inseparable parts of the whole, instead of individually, with no visible ties. This mixture of academics and the working world is what Career Education is all about. It is a concept designed to meet the needs of students, parents, employers, and society in general by putting relevancy back into the classroom.

Career Education allows students to choose their own future, whether it be college, vocational training, apprenticeship programs, or direct entry into the job market. It gives them an opportunity of achieving a saleable skill at the termination of their education in addition to the basic tools and goals to go on to further academic training.

Arizona has become a pacesetter in Career Education. We have taken the initial steps in providing our youth with the self-awareness and occupational knowledge that will aid them in making rational judgments in today's working world. Now we must continue to broaden and strengthen Career Education. To do this will increase the opportunities for meaningful education for all Arizona students. We have piloted a system, developed the structure, and educated a cadre of people that can implement Career Education in schools throughout our state. We need to build on this foundation to be able to reap the dividends of our investment for the State of Arizona and our youth.

By Representative Stan Akers
Speaker of the House

As one of the many Legislators who worked long and hard for the passage of Career Education legislation, I am delighted with the progress which has been made in this area in a relatively short period of time.

It was just two years ago that the Legislature appropriated funds to develop Career Education. At this time, Career programs are widely available throughout the State and, hopefully, will be available to each and every student in our State in the near future.

Our wonderful American freedom, by its nature, places an awesome burden upon its young people by making available to them a broad and complete scope of potential employment. They cannot be expected to make an intelligent choice if they have not been exposed to the world of work. We must also prepare the student who does not wish to, or feels he cannot afford to go on to college, to enter the job market upon high school graduation. Career Education will permit all students to experience conditions in the outside world and will give them a sound basis for making rational career decisions.

In short, we live in a world of work and we are doing our students a terrible injustice if we do not include Career Education in the curricula for grades K-12. Students must be prepared to eventually grapple with that world...enter it...and succeed in it.

BEST COPY AVAILABLE

The 'Ole Basics

Reading, writing, and arithmetic - - stalwarts in American education for many generations - - are now more important than ever. How many jobs exist today that do not require at least a basic competence in all three of the famous r's?

But the 3 r's - - which really represent all the basic education subjects - - need to be re-packaged and presented in a way that is attractive, exciting, and meaningful. Teachers are being asked to relate the basic education subjects to the world of work and to reality. Students today simply won't accept learning for learning's sake. They want to know "why" and they will understand "why" only when they are able to see the relationship between the textbook and the world of reality.

Teachers can relate the multiplication tables to the need to multiply as a matter of daily routine activity in the real world; and they can relate spelling and good grammar to the need for daily routine communication in the world of work. Only when students can clearly see the relationship will they "drop in" and accept classroom instruction as valid and worthy of their full attention.

My 3 Goals Will Lead To A Rewarding Life

Learning To Live - - This exemplifies Career Education's concern with preparing the total person for a complete and rewarding life. Career Education is more than just preparing individuals for jobs. Each week of a person's life consists of 168 hours - - not just the 40 he spends on the job. Learning to live involves self-awareness and preparing individuals for being productive, involved, and happy citizens during their many hours of leisure time.

Learning To Learn - - This goal impacts on motivating students so that they want to learn within themselves - - "intrinsically." So many students today attend classes physically, but are miles away mentally. The educational system has an obligation to instill the desire to learn in each and every student. Learning to learn also means developing in students the abilities to make rational decisions about their own educational options. And it involves educating students so they are able to take full advantage of all school programs as well as home and community resources.

Learning To Make A Living - - Equipping students with a saleable skill is certainly a cornerstone in any Career Education concept. For one student, career preparation may be passing a high school auto mechanics class. For another it may be completing a two-year program at a community college to become a computer programmer. And for still another it may be graduation from medical school.

Myself Defined

Career Education is still in the developmental stage. As a concept, it is flexible and subject to varying interpretations. This is absolutely necessary if Career Education is to mature and develop to its fullest potential.

The ARIZONA STATE BOARD OF EDUCATION and the ARIZONA DEPARTMENT OF EDUCATION have agreed on a definition of Career Education, which is a valid reflection of today's thinking on Career Education:

"Career Education combines the academic world with the world of work. It must be available at all levels of education, from kindergarten through the university. A complete program of Career Education includes awareness of the world of work, broad exploration of occupations, in-depth exploration of selected clusters, and career preparation for all students. This calls for all basic education subjects to incorporate Career Education as an activity. Education and Career Education are synonymous terms."

My Elements

Career Education is intimately involved with the world of work and with job preparation, but that isn't all it's involved with. Career Education is concerned with the "whole" person and the person's entire life. These are the eight elements or themes of Career Education that need to be integrated or meshed into the curriculum at all grade levels.

Career Awareness – Knowledge of the total spectrum of careers.

Self Awareness – Knowledge of the components that make up self.

Appreciations & Attitudes – Life role...feeling toward self and others in respect to society and economics.

Decision-Making Skills – Applying information to rational processes to reach decisions.

Economic Awareness – Perceives processes of production, distribution and consumption.

Skill Awareness – Ways in which man extends his behaviors.

Employability Skills – Social and communication skills appropriate to career placement.

Educational Awareness – Perceives relationship between education and life roles.

BEST COPY AVAILABLE

How I Work, Organizationally

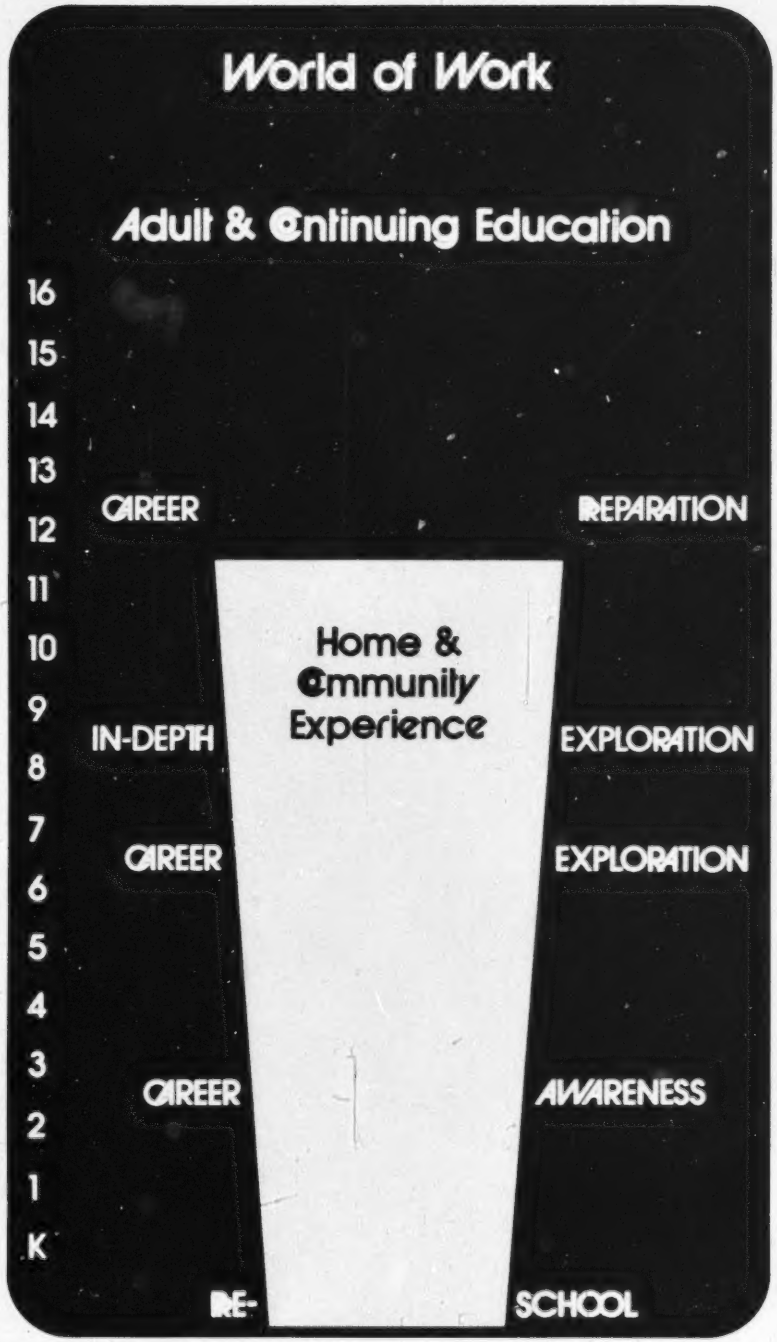
Career Education doesn't just happen in high school, or just in elementary school, as some are inclined to think. Rather, it happens at all grade levels, beginning in kindergarten and continuing through high school, college, and adult education. Presently, Arizona is concentrating on developing Career Education activities in grades K-12.

In broad terms, K-6 is the career awareness or career orientation stage. At this early stage, students should be made aware of the world of work in very general terms. One way they can be exposed to many different occupational families is by having employees visit the classroom in their work clothes to discuss and even illustrate their particular jobs. Another activity is role-playing, when youngsters sometimes dress up and pretend with each other that they are working adults in a simulated situation.

At about the 7th and 8th grade level, students can begin to explore career areas which are of particular interest to them. This can include using a variety of media (such as brochures, films, tapes, etc.) which may be stored in a school library or a special career media center. Field trips can now begin to take on added significance as students explore jobs in person. Some hands-on activities can now be experienced and appreciated. Academic classes can relate to on-going hands-on activities and to the world of work.

In 9th and 10th grades, the exploration phase continues and may intensify as students begin to realize the kinds of careers that interest them most. Field trips continue during this phase and hands-on experiences start to really enhance a student's exploration of a given selected occupational area. Where and when feasible, a student with a specific career interest might spend a day on the job with someone engaged in that career. This provides the student a real valuable insight into what the job is really all about - - the life style, the skills, the conditions surrounding the job.

In the upper high school level, career preparation becomes a prime activity. Work experience programs, such as cooperative education and similar methods of instruction, play an ever-important role. Students who have zeroed in on a career can go about the task of getting prepared for it.



BEST COPY AVAILABLE

Everyone Is Involved With Me

Career Education is a vehicle for reorienting the entire system of education. If that premise is accurate, then Career Education impacts on all facets of education. And it reaffirms the Arizona definition of Career Education which states that education and Career Education are synonymous. Career Education, then, involves . . .

ALL students - - the poor, the affluent, the young, the old, the deprived, the smart, the college-bound, the slow-learner. Career Education is not for JUST minority groups, but it includes them. It's not for JUST vocationally-oriented students, but it includes them. It includes, quite simply, ALL students!

ALL teachers - - the social studies teacher, the auto shop teacher, the English teacher, the science teacher, the drama teacher, and, yes, even the physical education teacher! How does Career Education implicate the music or physical education teacher? Simple. Notwithstanding a variety of possible careers for musicians and athletes, one of Career Education's three goals is "learning to live". Being able to listen to and appreciate music . . . and being in healthy physical shape and having an interest in sports is all very much a part of man's leisure time life. Also, all classroom teachers must assume a share of the responsibility to counsel students in regards to their expressed career interests.

ALL grade levels - - although Arizona is now committed to Career Education only in grades K-12, (ARS 15-1199), a complete fusion of Career Education into the educational system begins before kindergarten and continues into college, adult education, and continuing education. Or, as some would put it, "from cradle to grave!"

ALL jobs - - from doctor to driver, from plumber to private eye, from secretary to senator, from writer to repairman, from technician to tap dancer, from lawyer to lineman, and from actor to accountant. Career Education relates to every kind of job, from the ones that require very little formal education, to the ones that require four or more years of college.

ALL subjects - - just as all teachers are involved with Career Education, so then are all subjects. Academic subjects, vocational subjects, fine arts, and college preparation are all a part of Career Education.

I Am Evaluated

Since Career Education programs are funded primarily with Arizona tax revenues, the Department of Education has an obligation to insure that the money is being wisely invested in quality activities that will have a measurable and positive effect on students.

To assure that progress is being made towards achieving local Career Education program objectives, a variety of progress check points are made by the Department of Education. Each month the various state-funded Career Education programs report on the progress made towards achieving each of the program's stated objectives. The monthly report is also designed to check the extent of student exposure to career-oriented activities.

In addition to these progress reports, two on-site visits are conducted by members of the Department of Education staff. The purpose of these team visits is to assure that the Career Education project staff understands their mission and is working to achieve their program's objectives; and to review the project-developed products and evaluate their effectiveness.

The monitoring activities are aimed at insuring that Career Education programs are making the desired progress in improving education and at the same time making the maximum use of the tax dollar.

BEST COPY AVAILABLE

I Am Divided Into Job Clusters

"Clusters" is a word dear to Career Education's heart, but since it's a fine example of educational gobbledygook, perhaps a word of explanation is in order.

More than 23,000 different jobs have been identified just in the United States. Since Career Education is asking teachers to orient their lessons towards the world of work and to relate their instruction towards careers, some rational system of dealing with 23,000 possible careers has to be developed.

So, the clustering system is used. Those umpteen thousand job titles have been categorized into a dozen or fifteen , "occupational clusters". An occupational cluster is like a job family. It is simply a group of jobs that all have some basic common denominator and that require some common knowledge or interest. The transportation cluster is one example. It includes all kinds of jobs connected with the transportation industry, such as truck driver, airlines pilot, stewardess, ticket clerk, baggage handler, company executive, etc. Other examples of occupational clusters are health, fine arts, construction, manufacturing, personal services, and so on.

Teachers are able to relate to a handful of job clusters (or families) with relative ease. And a student with an expressed interest in a particular cluster can easily explore the many types of jobs included within that cluster.

I "Put It All Together"

Buckeye Union High School and the feeder elementary schools of Arlington, Buckeye, Liberty and Palo Verde are extremely receptive to the concept of Career Education as a good way to "put it all together." Teachers have always attempted to relate student interest and capability to job opportunity, but only in an incidental manner. Career Education calls for a planned approach to the opportunities for young people in the world of work. Seminars provided by the Westside Area Career Occupation Project (WACOP) have instructed more than 90 percent of the teachers in the area served in Buckeye Union High School District in the concepts of Career Education in the classroom. The administrative leadership of these western Maricopa County schools has designed a program to put the emphasis on the instructor and the children in the classroom. Counseling is stressed and will be used in many new ways not related to traditional counseling as we have known it.

Career Education presents the opportunity to develop a systematic approach to learning for each child by making use of each student's interest and desire to be "somebody - someday." Career Education will not replace any of the basics in our schools, but instead might be compared to a strong cord to be woven throughout the curriculum in a meaningful and relevant manner. New life can thus be furnished to programs designed for individual persons.

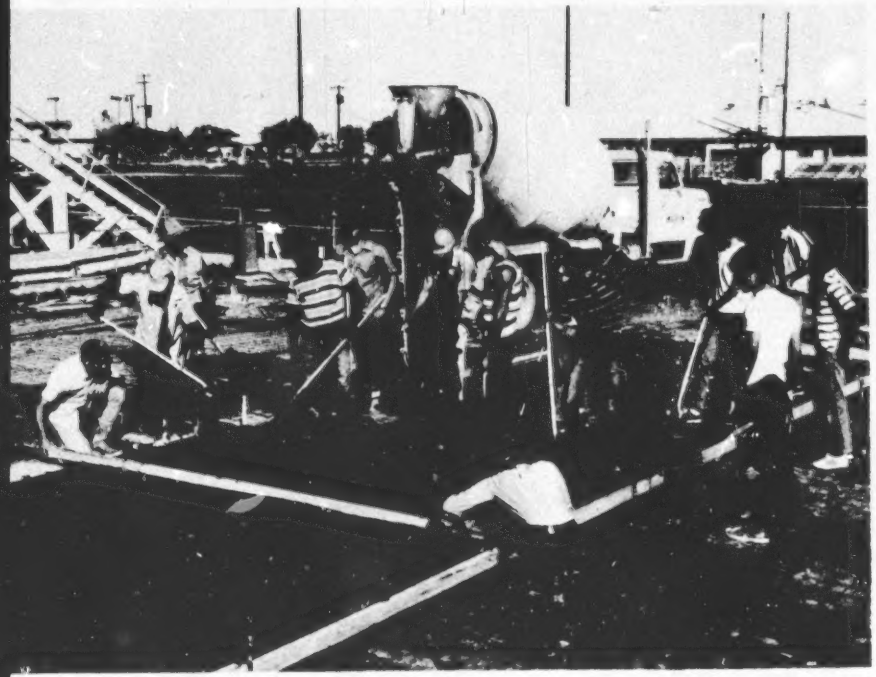
To be successful in most any job a person must realize his capabilities and the requirements of the job in which he shows interest. Even though a person may be retrained as many as eight times in his life, isn't it better that we prepare him with his first entry-level job skill than to not prepare him at all?

It simply does not make sense for a person to complete as much as 16 years of formal education and not have a saleable skill. Recently our legislative leaders felt strongly enough about this deficiency to feel prompted to appropriate money to do something about it.

Career Education embraces all subjects and their objectives. It weds the academic programs and the job skill programs. It should strengthen the vocational programs as we have known them because through counseling and student self-awareness, it is very likely that old barriers to vocational job skills will disappear. College preparation should be stronger through the wise use of measurable objectives.

Perhaps our situation at Buckeye Union High School is unique in that we have been unable to develop the scope and sequence of instruction that we would like for grades K–12. If, however, other schools find their situation similar to ours, they might discover the same invigorating response we have found when working with students on a planned future through Career Education. -- Chet McNabb, Superintendent of Buckeye School District.

BEST COPY AVAILABLE



My Future Success Rests On The Support Of Classroom Teachers . . .

One of the major thrusts in the Career Education movement is in the area of teacher retraining - - that is, reorienting the teachers about Career Education so that they, in turn, can relate their classes to the world of work. The reason for this is reflected in the Second Annual Arizona Advisory Council Report on Vocational Education:

> The future of Career Education rests to a great extent on the kinds of teachers and professional personnel that are prepared. In-service training must provide a great portion of the teachers and professional personnel needed.

Teacher retraining for Career Education involves a massive effort by each county or district project to help teachers of all discipline areas to become aware of and implement concepts which combine the academic world with the world of work.

In order to accomplish the implementation of Career Education, several approaches are used for teacher retraining. The awareness stage begins with teachers in a county- or district-wide workshop conducted by Career Education project staff. Other teachers may receive awareness instruction in short intensive workshops, extension courses offered through a university, or through individualized resource units.

Following the familiarization of Career Education concepts, the teacher may enter the orientation phase. This phase deals with possible roles of the teacher in Career Education classroom activities. These activities are then implemented into the on-going educational program of a local school district.

County- and district-wide workshops and extension courses have been conducted throughout Arizona. In-service goal statements, performance objectives, and individualized units have been field-tested and evaluated for use in future workshops and courses. As is the case with most innovative concepts like Career Education some teachers are very enthusiastic about what it can do for students, while others disagree with the idea.

The implications of Career Education for colleges of education are very real. Present and prospective teachers of all basic subjects need to be prepared by professors who are skilled in teaching methodology which combines the academic world with the world of work. - - Robert Kerwood, Arizona Department of Education and Northern Arizona University.

BEST COPY AVAILABLE

. . . And On Guidance Counselors

Emerging concepts and procedures in Career Education are having a decided impact upon the traditional role and functions of the school counselor.

Career Education is a team approach. Members of the team include representatives of the administration, specialized supervisory staff, classroom teachers, pupil personnel workers, para-professionals (aides), supportive staff, and community members. Directly and indirectly, this total team effort is addressing many critical student needs formerly and logically considered to be the responsibilities of counselors.

Orientation to self-awareness, attitudinal outlooks, and introductions to the world of work, are now being incorporated into the regular curriculum in the lower grades. Continued self and career explorations - - through hands-on experiences and visitations - - are becoming scheduled parts of middle grade subjects. Developing decision-making skills, and work-readiness programs are being instilled outside and within academic secondary school preparation.

When involved in this context, the counselor finds an immediate and an increasing demand for guidance expertise other than that used in one-to-one contacts with students. While the typical guidance worker has never lacked for extraneous assignments, he has always managed to keep counseling central to the needs of the individual student. This must not change.

However, as a school moves more members of the regular staff into the Career Education effort, guidance people are being expected to facilitate progress by providing team members with consultative and coordinating services related to career development. Many members of organized guidance programs are now using an increasing amount of time functioning as:

- Consultants to teachers and administrators (helping to understand students better, and providing sources of accurate information).
- Coordinators of group guidance activities.

- Counselors to teachers and parents.
- Coordinators of community resources.
- Consultants for curriculum development.
- Coordinators of placement services (temporary and career job placement, post-high school admissions, college).
- Coordinators of special student needs - - acting as a resource person in referring students to individuals and/or programs both within the school and in the community which offer solutions to a particular problem.

This role of the counselor as a resource person and as an activist, will grow in importance as the Career Education movement increases in range and in depth. - - Delbert Jerome, Arizona Department of Education

My Clearinghouse Provides Service

Duplication of effort is frequently a tremendous waste of human and material resources. To avoid having each of the Career Education projects duplicating each other's efforts (to avoid having each project "discover the wheel") the Department of Education has organized a Career Education Clearinghouse. The Clearinghouse collects, categorizes, and disseminates a wide assortment of Career Education materials. These include curriculum guides, instructional units, bibliographies, student workbooks, research reports, speeches, occupational information, commercial materials and others. The Clearinghouse also has access to various collections of materials on microfiche from throughout the United States.

The purpose of the Clearinghouse is to assist those involved and interested in Career Education in obtaining information and materials for their particular projects - - whether it be learning about Career Education, developing instructional units, or making a presentation before a local teachers' meeting. The Clearinghouse serves Career Education project personnel, teachers from throughout the state, and other interested parties.

Materials in the Clearinghouse are acquired from Arizona Career Education projects, other states, commercial companies, the U. S. Office of Education, and other sources. The materials are classified according to which of the elements it impacts upon, grade level, content area, type of material, and occupational cluster.

Arizona developed materials have been duplicated on microfiche by the Clearinghouse and distributed to each Career Education project. If a hard copy of a particular piece of material is needed, it is usually possible to duplicate it - - depending on the copyright situation, length, and reproducibility. As more career-oriented material is developed and as Arizona progresses towards fuller integration of Career Education into the educational system, the Clearinghouse will continue to provide these valuable services to all areas of the state.

Apprenticeship People Can Help Me

The Department of Education is working with the Bureau of Apprenticeship Training, the Arizona Apprenticeship Council, Western Apprenticeship Coordinators Association, contractors associations, employer associations, and joint apprenticeship committees to help develop standards of pre-apprenticeship training in high school. Some other areas needing agency cooperation are support of the Vocational Industrial Clubs of America; providing classroom speakers and on-site field trip opportunities; and providing assistance to schools by participation on school advisory committees.

Today, more than ever before, the skilled trades offer young people opportunities for rewarding careers. Therefore, to prepare students as successful apprenticeship candidates, teachers must schedule field trips, journeymen speakers, and numerous hands-on activities which allow students to "try it on for size."

In addition, students have to learn how to compute, measure, understand symbols, read specifications, and learn other skills related to the trade. Frequently, under the guidance of trade-experienced instructors, youngsters can gain valuable insight by using the tools, materials, and techniques on cooperatively-sponsored projects.

As various organizations become more familiar with the concepts of Career Education and affirm their support of career preparation programs, stronger educational programs will develop. It is anticipated that these agencies will be more involved with recommending curriculum design, laying out of shop space, assisting in the selection of instructors, assisting in placement, and recognizing graduates of such programs as qualified candidates for apprenticeship.

BEST COPY AVAILABLE

My Curriculum Is Career-Oriented

The emergence of Career Education has caused an awakening in many school districts and a new, thoughtful look is being taken at many components of the educational program. Few parts of the existing framework of education have escaped scrutiny. Many questions have been raised. The development of Career Education became involved with defining these questions and formulating their solutions.

The Career Education project at Mesa has been concentrating for two years on completing a central nucleus of curriculum development, which we call the matrix. This matrix - - or career oriented curriculum - - relates the eight elements of Career Education to each grade level, K—12. Each educational goal listed in this matrix has been translated into performance objectives. These, in turn, have been expressed in terms of educational activities - - the means by which students achieve competency.

Educational instructional units, averaging in length between 10-15 hours of instructional time, have been developed and are designed with certain ingredients in each: (1) A listing of matrix goal statements addressed in the unit. (2) Performance objectives for each lesson. (3) Educational activities, most of which have been tried and proven in classrooms at the appropriate grade level. These make up the core of each curriculum unit. (4) Media suggestions. (5) Optional activities for fast or slow learners, or learners with extra interest and motivation. (6) Pre- and post-tests, some of which are lesson-embedded, to assist both teacher and learner in determining amount, quality, and direction of progress. (7) Resource materials which are available and might prove beneficial to teachers and students.

These units are designed to be integrated into the on-going curriculum, not displacing time-proven activities and programs now existing. Each unit is thoroughly reviewed and critiqued at specific intervals to insure educational quality, consistency of format, and validity. Although an excellent educational program has been produced, it is recognized that the results are incomplete. There is further development required to fill in the gaps existing in the total curriculum, as well as reflecting the changing needs of education.

Most of the units are designed to be taught by the regular classroom teacher in the traditional classroom setting; some have been developed for joint use by the counselor and classroom teacher; others, in the areas of occupational training, are designed for independent study by the students.

Besides this effort on the part of the Mesa Career Education project, the Department of Education has developed its own Career Education matrix with the assistance of more than 300 teachers and administrators from throughout the state. The state matrix is similar to Mesa's in some respects, but the state's matrix, rather than listing performance objectives according to 13 separate grade levels, has divided K-12 into four groups: primary, intermediate, junior high school, and senior high school. - - Michael Sucharski, Mesa Project

BEST COPY AVAILABLE

My Folks Are Involved

The current interest in Career Education stems from a realization that the classroom is only one vehicle for learning, and that education must benefit the individual in other environments as well. Continuously relating the classroom to the outside environment demands that the educator utilize all available community resources, particularly the most immediate resource: the parent.

Involving parents in classroom activities provides numerous benefits: increasing the number of adult/child contacts; providing a broader background for learning through the sharing of parental experiences; developing a mutual interest between the parent and child of the other's activities; increasing the self-respect of the parent when he contributes as an "expert" to the educational program; and emphasizing the mutual responsibility of both parent and teacher in the education of children.

Techniques for involving parents in school situations are endless. In relating Career Education on a personal basis, visitations to the parent's work station, utilizing parents as resource speakers, and their assistance in demonstrating tools and/or skills are all valuable. Also, parents driving for field trips, providing materials for interest centers, learning kits, and occupacs, helping with special school/community projects, serving as teacher volunteer aides, etc. all give needed assistance to the schools. It is also advantageous for the teacher to make use of parents' individual avocations which can be discovered through simple interest inventories.

The goal of parent involvement is more than just the effect upon the career decision of students. Building parent-child communication and assisting in the improvement of family relationships will contribute to the total development of the student and his relationship with the society in which he lives.

An additional means of furthering these goals is to conduct parent/teacher discussion groups for developing mutual understanding, respect, and the skills in coping with the daily problems of adult/child relationships. Through the groups, parents can be introduced to the schools' efforts in Career Education and to the role of the parent in career guidance. Participation in the groups demonstrate that the "career" of educating children for both parents and teachers is a life-long, cooperative process. -- Barbara Barkenbush and Joanne Burns, Parent-Instructors, Pima County Project

Instructional Media Helps Me Do My Job

There are many ways of orienting youngsters towards careers in the world of work. Field trips. Classroom speakers. Work experience. All quite valid, but certainly not feasible in a lot of cases--especially in the earlier stages of career exploration.

The answer is media. And by media, we mean things like filmstrips, movies, brochures, pamphlets, career kits, cassette tapes, records, posters, etc. The WACOP (Westside Area Career Occupations Project) program is concentrating heavily on developing a media center which is comprehensive, readily-available, and functional.

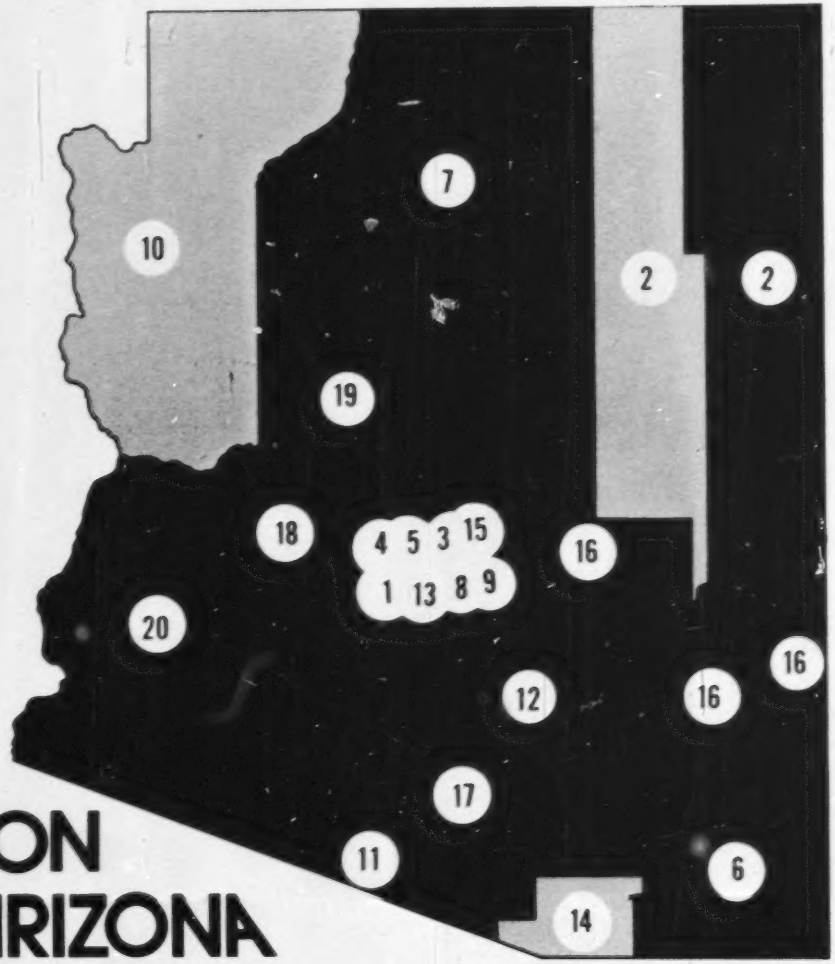
The media center has truly been a model of success, not only for the other Career Education projects in the state, but for those now developing Career Education programs outside of Arizona. National survey teams have asserted that WACOP's media center contains the most extensive collection of Career Education material in the United States.

The center is a service for teachers, counselors, and librarians, all of whom may check out materials on a free-loan basis for up to two weeks for preview purposes. Requested items are delivered and picked up by a project staff member. Teachers are asked to fill out an evaluation card as to how the materials were used and the effect they had on students. A unique item has been the development of cluster boxes, which are containers of free materials and some commercial items on careers grouped according to a list of occupational clusters. These cluster boxes can easily be duplicated by any interested teacher.

Review and consultation services are available at the center for all persons--not just those within the WACOP project. The response to the availability of these services has been very gratifying and is growing daily. The opportunity to try out media in the classroom before purchasing it is innovative and relatively inexpensive. But most important, it enables classroom teachers the means of exposing their students to a wider variety of potential careers. -- Ruth Catalano, WACOP Project

BEST COPY AVAILABLE

1. Agua Fria High School District
2. Apache-Navajo Counties
3. ASU Bureau of Broadcasting
4. Cartwright School District
5. Central Maricopa County
6. Cochise County
7. Coconino County
8. DICE (Tempe, Chandler, Apache Jct.)
9. Mesa Public Schools
10. Mohave County
11. Pima County
12. Pinal County
13. Roosevelt School District
14. Santa Cruz County
15. Scottsdale School District
16. Tri-County (Gila, Graham, Greenlee)
17. U of A Radio-TV Bureau
18. WACOP (Western Maricopa County)
19. Yavapai County
20. Yuma County



CAREER EDUCATION PROJECTS IN ARIZONA

BEST COPY AVAILABLE

Yavapai County

A major thrust of the Yavapai County project is a comprehensive information retrieval system made possible by a time-sharing computer network hooked up to participating schools. The system's nerve center is located at Yavapai College Computer Center.

The computer network makes available to rural schools a most unique service, a service providing instantaneous remote access to career information, community college data, university data, and financial aid data. These computer programs and facilities make it possible for students to explore the large data files stored in the computer, and to extract current, relevant information relating to the career of their choice.

Through a teletypewriter located in each school, the student may type each command requesting certain desired information. The computer replies by typing the requested data from the computer-stored data bank. As the student interacts directly with the information the computer produces, he can change his mind, and his instructions, at any point. This places the decision making where it belongs, squarely with the student.

Three data files are stored in the computer system.

1. The Occupational File is based on the Dictionary of Occupational Titles and contains detailed information on about 1,500 occupations with about 3,000 additional related occupations listed.
2. The College File helps the students to explore information about more than 1,500 colleges and universities across the country.
3. The Scholarship and Financial Aid File represents assistance available from sources such as the Federal Government, foundations, business, trade and labor organizations, religious and charitable groups.

Besides the computer network, the Yavapai project is involved with testing to determine career interests, career-oriented field trips, and various hands-on activities.

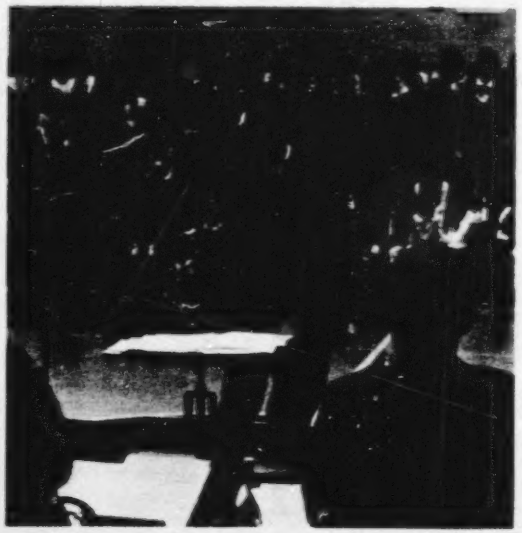
Cartwright District

A major emphasis of the Cartwright District Career Education project has been to develop effective ways of integrating the career concepts into the Social Studies curriculum.

A primary goal of the project has been to develop "module units" and make them available to classroom teachers. These units are guidelines for ways to emphasize the life/career relevance of one given concept, skill, attitude, or value common to the Social Studies curriculum. The project is also involved with training teachers so they are able to use these units properly.

Another goal the Cartwright project has been working to accomplish involves exposing all students in grades K-8 to career-oriented activities. In keeping with this, each student is to complete at least three career lessons which are designed to familiarize the youngsters with broad occupational areas.

Students in grades 4-6 are exploring the 15 occupational clusters developed by the U. S. Office of Education and should have a better understanding of the relationship between school and the world of work. This understanding is being documented through the use of pre- and post-tests.



Seventh and eighth graders are involved in an in-depth exploration of five of the fifteen clusters and are assigned to complete a project on at least one of them.

W.A.C.O.P.

WACOP (Westside Area Career/Occupations Project) serves school districts in western Maricopa County. It is funded for the acquisition, dissemination, and development of media, seminars, workshops, testing, and consultant services for teachers. Schools in the project are expected to implement Career Education concepts in every subject in grades K-12. Although working mainly with teachers, the entire project is child-centered in that every activity is planned so as to filter down to students directly and effectively.

In addition to presenting Career Education philosophy and methods, seminars are designed so that participating members develop and field test instructional packets which can be shared by other teachers. The seminars also provide an opportunity for teachers to become familiar with a wide variety of careers by means of personal contact on job-site-visitations and through speaker programs.

The media center is the heart of the project. Thousands of items (brochures, filmstrips, cassettes, career kits, etc.) have been purchased and are available to teachers on a free check out basis. The extensive media center has been a terrific aid to teachers and a rewarding experience for the students.

WACOP works closely with an Advisory Committee which includes 19 people from businesses and industries located within the area. Advisory committee members screen and advise the project on occupational information media, find speakers, develop in-field sites for "Tag-Along" projects (hands-on experience), find sites for job-site-visitations (seminars) and field trips (elementary and high school students), and assist in keeping local service clubs involved.

BEST COPY AVAILABLE

Mesa Public Schools

Mesa Public Schools was selected to develop a comprehensive K–12 Career Education program both by the Arizona Department of Education and the U. S. Office of Education.

The main purpose is to provide each student the opportunity to learn about himself, the world around him, and the requirements and opportunities related to his entering the world of work. Each student should have access into an occupation and a life style for which he is trained and emotionally equipped.

Career Education in Mesa has several components:

1. CURRICULUM AND EDUCATIONAL PROGRAM: An efficient, fully-integrated curriculum has been developed to permit the student to progress systematically from an awareness of himself and the world around him, to eventual entry into the adult world as a well-adjusted person.

2. GUIDANCE COMPONENTS: A student-data and career-information system is being developed to provide usable information to the students and teachers at the appropriate time. In addition, guidance instructional units have been developed to be taught in the regular classroom, with the assistance of the guidance counselors.

3. PLACEMENT PROGRAM: Provision is being made to place students in the community to find out about jobs and, later on, to obtain job skills in the occupational area of their choice. There is also an organized program to place students in permanent full-time jobs. Developing human resources for guest speakers, identifying work-training sites, scheduling students into appropriate experiences, and providing transportation are integral parts of the program.

4. IN-SERVICE PROGRAM: A program to orient school personnel as to the meaning of Career Education and a training program for instructional personnel in appropriate skills to teach Career Education have been developed as part of this program.

None of these components have been totally developed and refined. A semblance of each was made functional in the Mesa system during the 1972-73 school year. Future tasks involve completing, refining, and totally implementing the program in the Mesa School System, K–12.

Yuma County

The Career Education program for Yuma County Schools is designed to establish the abilities necessary for the local teaching and administrative staff to effectively implement the concepts of Career Education into the existing elementary curriculum. The goals, objectives and activities of the program are designed to:

1. Orient the entire educational staff (teachers, counselors, and administrators) with an indepth knowledge of Career Education.

2. Revise the teaching methods necessary to achieve complete implementation of Career Education.

3. Direct learning experiences using Career Education as a theme to affect student behavior.

The project is working with 300 elementary teachers in 12 districts, and 50 secondary teachers in two high school districts. Conferences and workshops are being provided to enhance the understanding of Career Education.

Mini-workshops are being conducted in each district to involve the educators in Career Education-type learning experiences and to identify and/or develop student performance objectives by grade level or subject area. Selected teachers with an expressed interest in Career Education are participating in a special training program to enhance their competencies in Career Education. These teachers will then serve as Career Education Resource Teachers to help conduct mini-workshops.

Students in Grades K–6 are being provided classroom and non-classroom learning experiences designed to enhance the basic learning process. Innovative techniques are being used to motivate learners. Conference/lecture telephones are being used by schools to allow students an opportunity to interview, carry on discussions with, and hear lectures from people in career fields of interest to them when it is not feasible to take field trips.

Elementary teachers are conducting career activities that allow their students to study specific careers using hand puppets and role play skits. Junior high students are receiving "hands-on" experiences in selected occupational clusters. A corporation is being set up to allow students in math, English, and social studies a chance to sell stock, maintain a set of books, write letters, and transact and study labor relations.

Community and parent resource speakers are bringing current career information into the students' lives. Career guidance activities help students develop self awareness. Students are visiting with different community workers throughout the community to observe them on-the-job as well as inviting them into their classroom. The students follow up these experiences with vocabulary development, letter writing, reading and creative art about what they have observed.

BEST COPY AVAILABLE

Tri-County

Because of the rural nature and the isolated position of Gila, Graham, and Greenlee Counties, a Career Education concept is needed to expose students to opportunities in the world of work. The area is characterized by a high percentage of ethnic minority students.

The objective of the Tri-County Career Education project is to provide career information, career awareness, career exploration, and career preparation to all the students in the area. The project is characterized by four basic components:

1. Faculty Development — Teacher orientation to develop an appreciation and understanding of Career Education objectives and to implement the concepts in the classroom;
2. Student Development — Career Education exploration and expanded awareness to bring the urban and metropolitan advantage to the rural setting;
3. Community Development — Expand the understanding and the appreciation for the Career Education concept to parents, employers, community, and school administrations; and
4. Media Distribution — The technique for distribution of media to the far reaching parts of the large geographic area. Librarians in the Tri-County area decided they could serve the community by sponsoring career media fairs. Vendors were invited to set up displays of their career-oriented media. Teachers, parents, and others from the community were invited to examine the displays.

Apache-Navajo Counties

The 20 school superintendents of this two-county area have unanimously agreed to support the following goals:

1. To provide a career testing and guidance program for 8th and 9th grade students.
2. To provide a multi-media center of career information.
3. To integrate career ideas and activities into the curriculum.
4. To hold county-wide and district level career workshops.
5. To develop a model "Hands-on" career program.

Three curriculum resource people are assisting educators who wish to integrate world of work ideas into their daily teaching. They are supplying ideas, films and teaching materials. A full-time counselor is available to conduct career guidance activities in any of the public junior high or high schools. Most students in grades 7, 8, and 9 will receive this service during the school year.

Over 500 items are available in the Career Media Center in St. Johns and some 7,000 students will be exposed to those resources. A pilot "Hands-on" project is providing opportunity for local elementary school children to spend an hour each day using high school facilities to gain experience in five job cluster areas: consumer and homemaking related; hospitality and recreation; transportation; construction; and business and office.

Cochise County

The Cochise County Career Education Project serves 28 elementary and secondary school districts. The major thrust of the project lies with the implementation, by classroom teachers, of learning activities aimed at improving education by relating it to the real life goals of students. Activities are being implemented to increase career awareness, to develop positive attitudes about the world of work, to increase the motivation of students, and to improve the educational and occupational planning abilities of students.

To accomplish the goals, a series of Career Education planning workshops are being conducted for teachers, administrators, and counselors. The workshops are committed to significantly improve the ability of school personnel to plan and implement Career Education activities.

Workshops, however, are only the beginning. The county has been divided into four geographical areas, with each area assigned a Career Education Specialist. The specialists are serving as resource people and provide frequent assistance to teachers in the development and use of Career Education activities and materials. All teachers in the county can use any of the material in the Multi-Media Career Education Library. A growing collection of teacher developed materials and commercial media is available for all grade levels and all school subjects.

The project is very interested in involving parents and others with the program. Mini-courses are becoming popular as a device for helping students to explore a number of career and leisure time activities. Businessmen and parents are very helpful in teaching some of these courses. Businessmen are also enthusiastic about providing opportunities for both short-term work experiences and for cooperative education. Career fairs, simulated employment services, group guidance activities and many other devices are being used to show students how school relates to the real working world.

Central Maricopa Careers

Learning should be meaningful in the present and applicable to the future. Learning takes place both inside and outside a school classroom. We learn that which is interesting and enjoyable. The student is the person who decides what is to be learned in school.

The above statements are the educational philosophy of the Central Maricopa Careers Project (CMCP). The main thrusts of this project are as follows:

CMCP is responsible for implementing Career Education in Phoenix Union High Schools and in the 13 elementary school districts whose students will attend a Phoenix Union High School. The project serves 110 schools with a total enrollment of about 100,000 students.

Since many teachers, administrators, parents, and students, are not familiar with Career Education, the project director and 11 coordinators meet with many individuals and groups, introducing these new ideas. CMCP began by organizing small teacher workshops at individual schools and expanding to school district-wide workshops. Small workshops could involve as few as five teachers and the large workshops have served as many as 500 teachers, counselors, and administrators.

Teachers and counselors are given sample activities, teaching units, and career information at workshops and through a college credit course at Arizona State University. Using these samples, they are encouraged to develop materials of their own which may be incorporated into their subject areas.

CMCP also provides a speaker service which teachers may use to bring persons from the world of work into their classrooms. Complementing the speaker service are career-centered field trips. The field trips allow students to observe people working and using concepts which the students are currently studying at school.

A most important part of the project is the media library, which lends films, filmstrips, cassettes, pamphlets, and career kits to teachers and interested parent groups. Finally, and most important, CMCP serves students directly by helping teachers set up activities such as Career Fairs, and by assisting counselors with testing programs, on-the-job visitations, and the setting up of parent-teacher-student advisory committees.

Mohave County

Mohave County Career Education has a five-pronged approach:

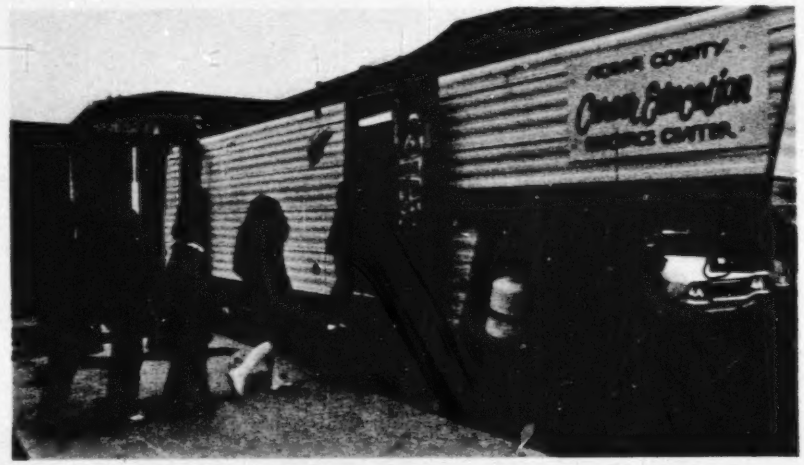
One goal is testing and guidance. Career interest surveys and special aptitude measurements are made to help students better understand themselves and their abilities so they are better able to make career plans. A second goal is concerned with providing career information to all students in the county. The Mobile Resource Unit (housed in a trailer van) is designed to meet this goal. The Unit visits every county school and in most schools 100% of the students explore the occupational information readily available to them in the traveling resource center.

BEST COPY AVAILABLE

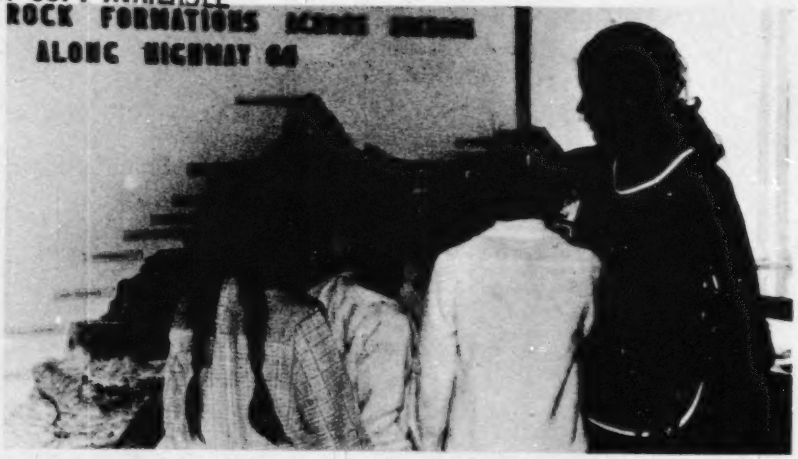
A third goal is concerned with relating the 3 R's to the world of work. Teachers are encouraged and assisted in preparing instructional units pointing up the usefulness of academic subjects to one's life work. A fourth goal is concerned with increasing student awareness of careers. Students are provided on-site observations of occupations through field trips. Workers come to the classrooms to tell about their occupations and answer questions.

The fifth goal is concerned with public relations. Information about Career Education activities is publicized in the newspapers and over local radio stations. The public is continually informed about what is happening with Career Education in Mohave County.

The Mohave County Career Education Project serves a large, predominantly rural area. The size of the county, 1,300 square miles, indicates the great distances which must be traveled to reach the schools served. The Career Education office is located in Kingman and coordinators travel up to 50 miles to reach outlying schools. Three schools are located in the "Strip" area north of the Grand Canyon and it is necessary to drive about 275 miles to reach those schools. Although this distance precludes serving the schools on a frequent basis, the Mobile Resource Unit visits the schools regularly and provides the students with an important source of current information about many areas of occupations.



BEST COPY AVAILABLE



Coconino County

The Coconino Career Education Project staff works with teachers to integrate the Career Education themes into the existing curriculum, demonstrate new approaches in workshops, and provide experiences which improve student learning. A work experience program for the junior high school in Flagstaff involves placing students in non-paying jobs for a minimum of ten hours. The students are placed in jobs which are related to their career interests and which demonstrate the application of specific course content.

A developmental approach to career planning and course selection is started at the 8th grade. The students identify tentative career choices and select courses to take the following year. To do this they utilize data obtained through tests, self-awareness units, exploring job families, work experiences and activities related to expanding awareness and exposure to the the wide variety of jobs. Emphasis at the high school level involves recruitment to increase enrollment in the career preparation programs. Activities and special events involving students, parents, and representatives from the community are planned and conducted.

At the elementary level, the emphasis is on fusing career awareness into the activities of the children. It's much too soon for these children to be making firm decisions about their future careers, but this is the place to provide a broad awareness of and orientation to the working world. For example, one elementary school principal, after receiving teachers' lesson plans, is working with the teachers to integrate the Career Education themes into each lesson plan.

Agua Fria High School

Avondale's Agua Fria Union High School is one of six high schools in the United States participating in a planned effort to upgrade its career guidance program. Using materials and procedures developed by The Center for Vocational and Technical Education at Ohio State University, Agua Fria's Career Education project is making its career guidance program more responsive to the needs of its students and the community. "Operation Guidance" was begun in September of 1972. By June of 1974, the school should have an individualized guidance program that matches its needs with its resources. The responsibility for developing Agua Fria's guidance program rests with the students, their parents, graduates, counselors, teachers and staff members, as well as interested citizens in the Avondale—Goodyear—Litchfield Park area.

Agua Fria is now operating in the second of seven stages which involves the collecting of information about the students, the school and the community. In subsequent stages of "Operation Guidance", the information will be used to derive feasible career guidance goals and behavioral objectives. Next, actual services and materials will be selected so that students can achieve the objectives. The last stage of the "Operation Guidance" program provides a method for the school to re-evaluate periodically and upgrade its guidance program.

Roosevelt District

The major thrust of Career Education in the Roosevelt School District is to use this concept of education as the core of the existing curriculum. "Careers" is being incorporated into all phases of academic exploration. Teachers are encouraged to refocus curriculum so that basic subjects will be presented in terms of how they relate to living, to the world of work and to the world of leisure.

Students, teachers, parents, and members of the community are interacting to make learning experiences alive and vibrant. Persons representative of many occupations and avocations are coming into the classroom to demonstrate how their jobs are done and to discuss the conditions and life-style connected with that job. A wide variety of field trip experiences include trips to power plants, construction sites, vocational schools, restaurants, movie locations, airports, automobile dealerships, hospitals, shopping centers, mines, fish hatcheries, farms and office buildings. Cooperating merchants and business people are giving students an opportunity to actually work for an hour or two on jobs.

Other facets of the program include a Teacher Exchange Program, a Teachers' Speakers Bureau, A Teachers' Advisory Committee, and A Teachers' Career Education Committee. Attitudinal and career awareness tests are administered on a pre-post basis. Demonstration classrooms, mini-grants, pre-service and in-service workshops are used to enhance the commitment of teachers and administrators. A Community Advisory Committee is composed of merchants, parents, workers, and a representative variety of organizations of the local area. Patrons are made aware of the Career Education program through pamphlets, news media, and personal contact.

BEST COPY AVAILABLE

Pima County

The Pima County Developmental Career Guidance Project is a joint effort of ten school districts developing and implementing Career Education and classroom guidance activities in the Pima County schools, K–12. Project personnel are working with teachers, counselors, administrators, parents, and students in 45 elementary and secondary schools throughout the county.

The Pima County project has a strong guidance orientation, both in personnel and philosophy, and is concerned with the TOTAL development of all children. Project staff work in close cooperation with elementary teachers and counselors to assist students to become aware of and begin to examine their values and attitudes, and how these personal characteristics influence their future career choice.

Junior and senior high students are encouraged to examine the attitudes related to successful employment, as well as to consider their own attitudes and interests. The project also involves junior and senior high school counselors in the classroom, especially in guidance discussion of: (a) long and short range goals; (b) career choice and associated life styles; (c) communication skills necessary in career preparation.

Intelligent decision-making involves becoming aware of and then investigating possible career alternatives. The Pima County project makes extensive use of field/study trips to further career awareness. Cameras and tape recorders are an important part of field/study trips and are used by students in sharing their experiences with their classmates.

The Pima County project is working to coordinate the efforts of the business and education communities, as well as informing community members of Career Education activities. From these efforts, an extensive file of resources, speakers, and field/study trip sites available in Pima County has been developed. Parents are also an important part of the Pima County Developmental Career Guidance Project. The project sponsors Parent-Study groups for parents who are interested in understanding and aiding the career development of their children. Parental involvement in the education process is secured by enlisting their assistance as resource speakers and para-professional aides.

Scottsdale District

Project: Career Bound services grades 6–12 in the Scottsdale, Paradise Valley, and Cave Creek School District. With assistance from professional Career Counselors and Aides, each school operates programs developed by their teachers and administrators. Objectives are to:

1. Integrate career concepts into ongoing teaching, demonstrating the relationship of education and work roles and create positive attitudes towards work.

2. Train teachers, administrators, and counselors to increase Career Education skills.

3. Counsel students in the process of developing decision-making skills.

4. Develop and refine curriculum which illustrate how to teach the career concepts.

Methods include use of specially trained teachers to demonstrate career materials, or lessons, disseminate information, and create new approaches for classroom teachers. Teachers are also writing lesson materials and designing career teaching aids. A resource center, operated by the project, coordinates all commercial and teacher made media and lessons, originates news letters, bulletin boards, and ties the diversified project together. Classroom methods include experiences with actual workers through speakers, tele-lectures, tours, and four to eight hour visits on a one-to-one basis with the students in an actual work setting.

Students gain insight into their individuality through setting up their own companies, hosting career days, taking interest surveys, and thinking about how they want to live as adults. Teachers and counselors attend workshops to increase their ability to offer an education which causes the students to learn a living, learn to learn, and learn to live.

BEST COPY AVAILABLE

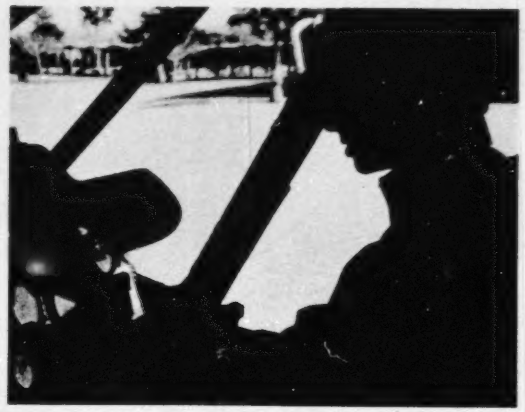
D.I.C.E.

The DICE (Demonstration in Career Education) Project is a new cooperative Career Education venture in the four school districts of Tempe, Chandler, Gilbert and Apache Junction. The project utilizes a 14' x 65' mobile office and media center. This mobile unit serves not only as the headquarters of the Career Education staff, but also as a study and resource center for students and teachers. The mobile unit is scheduled for month-long visits to each school district. Library materials and media are available to students and teachers for either check-out or use in the resource center.

The project's main thrust is directed toward incorporating occupationally oriented hands-on activities in grades 6 through 9. These activities are designed to complement rather than replace existing curricula. Other goals of the DICE Project include: (1) Increase enrollment in secondary school career preparation, (2) Provide career testing and counseling services, (3) Disseminate career information to all students, (4) Retraining of teachers, counselors and administrators, (5) Develop curriculum materials, (6) Implement work experience programs.

DICE aims to further the career development of the student and in so doing will emphasize the student's personal development. The career framework will provide for assisting each young person in developing a realistic and satisfying concept of himself and the changing world. The dignity of work is being emphasized as the students are exposed to varied career-oriented activities.

Involvement is a primary focus of the project. To involve the educators, ten four-hour workshops and a three-unit credit course with the cooperation of the university extension staff is available. Project personnel have not only been involved in Career Education philosophy and implementation, but also in curriculum development relevant to their teaching assignments. Counselors are now actively involved in career testing and guidance. Administrators are involved in planning, organizing, administering and implementing educational and career objectives. Involvement of the students in traditional co-op endeavors has been increased. Career days, Career Trade Fairs, as well as special career projects have been initiated. Students have been involved in field study trips for the purposes of furthering career decisions.



Public Information Projects

The Career Education bill passed in 1971 identified public information as an important ingredient in the over-all effort to implement a total program of Career Education. The Legislature recognized the need to have an informed and involved public, without which Career Education will ultimately fail.

To partially satisfy the public information requirement, the Department of Education has funded two projects which exclusively involve public information. One is with the Bureau of Broadcasting at Arizona State University and calls for the production of a Career Education television series, consisting of 20 half-hour programs.

The series, which deals with many different aspects of Career Education, is being aired weekly on KAET-TV, channel 8 and KUAT-TV, channel 6. The programs include film segments shot on location, cartoon animation, and in-studio interviews. A number of the programs are appropriate as in-service training for teachers, whereas others are designed more for the general public. Still others are videotaped and used as the basis for classroom instruction.

The other public information project involves a contract with the Radio-Television Bureau at the University of Arizona which calls for the production of short featurettes and "spots" of varying lengths about Career Education which are duplicated and sent to commercial radio and TV stations throughout the state. These radio and TV mini-features are designed as public information tools and are provided to commercial stations for use (on a voluntary free basis) as public service spots, feature items on news programs, or special programming material. Many of these units are tailored to appear to specific geographical areas of the state, and several of the programs are produced in Spanish.

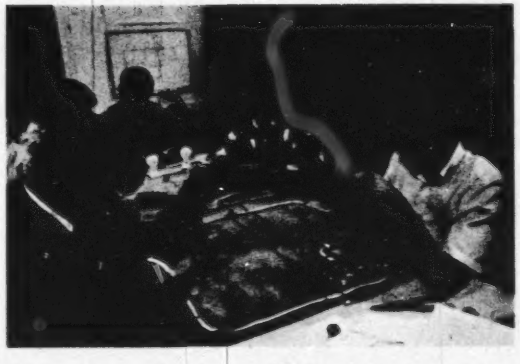
BEST COPY AVAILABLE

Santa Cruz County

In the Santa Cruz Project, teacher involvement is promoted through in-service Career Education workshops. Teachers enrolled in these workshops meet once a week for approximately fifteen weeks for informational exchanges, field trips and guest speakers from trade schools, colleges and the world-of-work. As a requisite for this workshop, each teacher participant, is required to produce career teaching units to be implemented in the classroom during the semester of enrollment.

Based on the belief that a diversified back-up program could increase the quality of these planned learning activities, the project has undertaken this task for interested teachers in the fifteen schools in the project area. The project provides materials and/or a materials budget for career activities, assistance in identifying and providing speakers, a budget and coordination for field trips into the world-of-work, coordination of community involvement, and finally, an information service through community volunteers and project staff that provides the public with information on Career Education.

The information is disseminated through talks to local clubs and civic organizations, through local newspapers throughout the project area, through local radio and television stations and finally, through a project-wide "Career Education Fair" held for all teachers and community members. Community information includes not only what the schools are doing with students, but what an interested community might do to help bridge the gap between the educational system and the world-of-work.



Additional information about each of these projects can be obtained by contacting the local project director. A mailing list of the project directors may be requested by writing to Career Education, Arizona Department of Education, 1535 West Jefferson, Phoenix, AZ 85007; or you may call (602) 271-5711.

Pinal County

About 70 percent of the 1971 high school graduates in Pinal County did not attend a single class which was designed to orient them about careers and the world of work. The over-all purpose of the county's Career Education project is to bring about a career awareness within the county, the various communities, the businesses, the schools, and the students around which the project revolves.

Orientation workshops for teachers have been held, covering career awareness, rationale, and various methods of implementation. One workshop was attended by 150 teachers who worked at developing teaching units that had been requested by teachers throughout Pinal County.

An intensive testing, guidance, and counseling program is providing 7th and 8th grade students an opportunity to select a general career cluster goal, while 11th and 12th grade students are being assisted in selecting an occupational specialty. These choices do not, of course, commit a student to that career, but provide nim a starting point from which he can explore and investigate that occupation.

The effectiveness and success of the Pinal County project will be reflected in curricula changes that will reflect a growing concern to relate classroom instruction to the working world. The project is concerned mainly with developing student awareness about possible careers, giving students the opportunity to explore various potential careers, and relating these activities to the development of a saleable skill.

Casa Grande is a good example of a community that is totally involved with a Career Education program. Students there were involved with a project where they completely renovated sub-standard houses in the community. Besides the manual labor involved, students spent a lot of class time planning, designing, landscaping and learning how to work with each other. Students learned a lot and enjoyed doing it in the process; and the community benefited -- in more ways than one.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION:

Its Role In Career Education

In Arizona we think of Career Education as a central theme which relates all areas of education. It is an idea that emphasizes the importance of the individual, the experiences he has, the work that he does, and the many decisions he has to make. Career Education involves every area of education because it deals with the whole student, the whole world of work, and the whole world in which he will live and work.

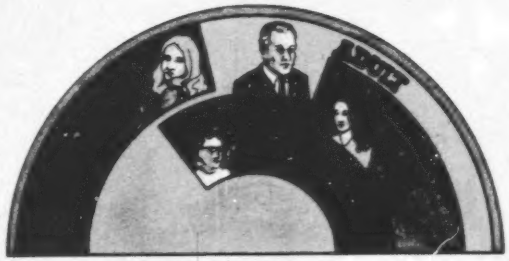
Vocational Education is a part of Career Education. Relating to the important career preparation phase of Career Education, Vocational Education deals with the non-professional part of the world of work, and that covers about 80% of all occupations. Some of these occupations require highly specialized skills that are developed as a part of the total educational process.

Vocational Education helps the individual build upon earlier career orientation experiences in which more self-awareness and familiarity with the total world of work was developed. The student begins to identify with a particular career field and Vocational Education provides the opportunity to prepare for entry-level employment in that field. Depending upon the kinds of skills required at this level, these needs can be served at either the high school, community college, or adult level of Vocational Education.

Vocational Education has three missions: to prepare each individual for employment, to help him update and upgrade his occupational skills, and to provide the opportunity for retraining in new occupational skills. These missions help Career Education serve the individual at any time of his life during which he feels the need for additional preparation for reaching his potential as a contributing member of society.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION



The Levels

Vocational Education programs are offered at four different levels, with each level having a major goal. The programs in each level are different because they are designed to achieve these goals.

The first level is called "pre-Vocational Education." Its major goal is to help individuals make meaningful and informed occupational choices. Programs at this level are generally offered in grades seven through ten, and are designed to help individuals learn about broad fields of occupations that may relate to their particular interests and abilities.

The second level is "secondary Vocational Education." It is identified with the high school and is included in the comprehensive high school program. The major goal for programs at this level is to prepare individuals for entry-level employment in occupations requiring semi-skilled and skilled workers.

The major goal of post-secondary Vocational Education, the third level, is to prepare individuals for highly-skilled or technical occupations. These programs are offered in Arizona's community colleges which are also designated as area vocational centers.

Adult Vocational Education is the fourth level, and it is provided through many different kinds of educational institutions. Evening classes are the most common and are offered in high schools, community colleges, and universities. The major goals of adult Vocational Education are to help individuals upgrade their skills or to learn new skills for different kinds of employment.

Home Economics

Home Economics Related Occupational programs are designed to prepare persons for gainful employment in recognized occupations for which persons normally receive a wage, salary, fee or profit.

A student may have in mind to be a florist, chef, child care aide, or fabric consultant. These are just a random sampling of the specific jobs which relate to the home economics occupational cluster. The program has been developed with five major components: Food Management, Production, and Services; Clothing Management, Production, and Services; Institutional and Home Management and Supporting Services; Home Furnishings, Equipment, and Services; and Care and Guidance of Children and the Elderly.

In the food service area, students may study in such programs as FEAST (Food Education and Service Training), food service, or HERO (Home Economics Related Occupations). Emphasis is placed on quantity food production and service to the public.

The area of child care is fast-growing and much needed in Arizona, where two out of five married women with children go to work each day. The students studying in either child care or in HERO programs learn about the care of children, health regulations, and the operation of day-care centers. Home furnishings and clothing and textiles are frequently combined for students in order to study principles of color and proportion, textiles display, and coordination.

Marketing & Distribution

The goals of Distributive Education are to: (a) offer instruction in marketing and distribution for students

interested in these occupations, (b) aid in improving techniques of distribution, (c) develop an understanding of the social and economic responsibilities of those engaged in distribution in a free competitive enterprise society, and (d) place an emphasis on helping each student develop an occupational awareness, as well as a saleable skill, for the multitude of careers available in this field.

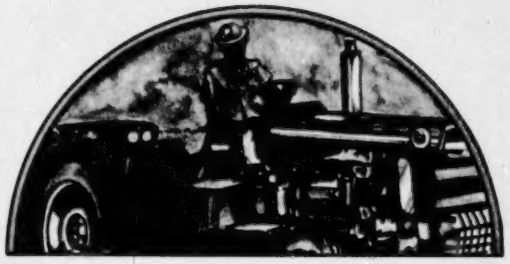
Distributive Education programs are offered in high schools, community colleges, and in cooperation with business people engaged primarily in marketing or merchandising goods and services. Distributive Education combines a program of work and study and involves the cooperation of schools and community businesses.

These programs are designed to prepare individuals to enter, or progress or improve competencies in distributive occupations. Emphasis is placed on the development of attitudes, skills, and understanding related to marketing, merchandising, and management. Distributive occupations are found in such areas of economic activity as retail and wholesale trade, finance, insurance, real estate, services and service trades, manufacturing, transportation, utilities and communications.

Eleventh and twelfth grade programs feature in-depth courses in career preparation. It is here that students who have decided upon a direction can learn a saleable skill. The students receive instruction in basic business procedures such as buying, selling, pricing, advertising, customer services, personnel services, capital, credit, and records. As a result of having actual job experience, each student is equipped to make a meaningful choice of whether to continue with career preparation or whether to begin work immediately.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION



Public & Personal Services

Approximately one out of every nine workers in the United States is employed in the public services. All trends in local, state, and federal employment continue to indicate that vast numbers of new people will have to be educated and trained to enter government employment in the foreseeable future. Demands for an increased number of workers have, in turn, created a need for school curricula directed toward preparing individuals for these expanding opportunities.

The United States Office of Education defines public service occupations as those pursued by persons performing the functions necessary to accomplish the mission of local, county, state, and federal government except for military service. These missions reflect the services desired or needed by individuals and groups, and are performed through arrangements or organizations established by society, normally on a non-profit basis, and usually supported by tax revenues.

Based on this definition, eight "major occupational groups" have been identified: Government Agency Management; Social and Economic Services; Educational Services; Resources Management; Urban, Rural, and Community Development; Public Safety, Corrections, and Judicial Services; Regulatory Services and Records; and Transportation Management.

Most of the community colleges in the state are offering some course work in the public service area. Among them are such programs as law enforcement, fire science, public administration, and building inspection.

The personal services occupations are basically concerned with rendering a variety of personal services related to the physical appearance of individuals. These include such areas as barbering and cosmetology, which encompass such tasks as haircutting, styling, shampooing, scalp and skin treatment, hairpiece fitting and maintenance, and manicuring. Other occupations in the personal services category are theatrical and television make-up and physical culture specialists. Household pet services and mortuary science are often classified in the personal services area also.

Agri-Business & Environment

The broad field of Agri-Business and Environmental Control represents the second largest industry in Arizona - over $1.5 billion. Production agriculture alone accounts for $730 million or approximately 50 percent of the total.

The chain of agricultural career opportunities starts with the suppliers to farmers - those who manufacture and sell such things as machinery, fertilizers, chemicals, feed and seeds, or who provide credit, insurance, and technical services. Farmers and ranchers are the central link. They are the producers of raw materials. The next step includes marketing, storage, processing, transportation and distribution. The entire agricultural complex employs over 20 million people in the United States.

Career preparation in agriculture requires competencies in one or more of the following areas: plant science, animal science, agricultural mechanization, soil science, farm management, and agricultural leadership.

There is, of course, a wide range of exciting careers in agriculture. Arizona high schools and community colleges offer programs that will prepare students of all ages for positions in the following career areas:

1. Agricultural Production (as an owner, manager, tenant, technician, laborer, etc.)
2. Ornamental Horticulture (positions in turf management, landscaping, florist, greenhouse management, etc.)
3. Agricultural Mechanization (equipment mechanic or operator, welder, engineer, sales and service, etc.)
4. Agricultural Supplies and Service (positions with off-farm businesses, industry, and agencies that provide supplies and services to the agricultural community)
5. Agricultural Products (positions in the food processing industry, quality control, meat cutting, etc.)
6. Agricultural Resources (conservation, wildlife, outdoor recreation, forestry, and other careers related to environmental control)

To supplement classroom instruction, students receive work experience in the school shop, greenhouse, and land laboratory. Off the school grounds they conduct plant and animal projects, gain work experience through employment in either farm, agri-businesses or through a cooperative occupational experience program.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION

Hospitality & Recreation

The Hospitality and Recreation occupational clusters provide training and instruction for employees who are serving the food, lodging, and recreational needs of people away from home, either voluntarily or involuntarily.

Hospitality and recreation is one of the largest and fastest growing industries in the United States. Nationally, it is the third largest employer -- four and one-half million persons. Arizona alone employs nearly 97,000 persons in the various facets of the hospitality industry. Programs are offered at several levels in the hospitality and recreation cluster:

At the high school level, programs provide training for entry level positions. The Northern Arizona Hospitality Education Project (NAHEP) has been developed to meet the need for trained employees in the hospitality industry across northern Arizona, especially on the Navajo reservation and bordering communities.

Home Economics Related Occupations (H.E.R.O.) provides education for some entry level hospitality positions, such as food preparation and service, and related jobs, whereas Agriculture Education trains for grounds keeping, landscaping, and positions in outdoor recreation. Instruction in maintenance and related jobs is available from Trade and Industrial Education.

An emerging field is concerned with Agricultural Resources leading to careers related to environmental control. In these programs, basic information relative to the world of work and in the skills and knowledge needed for the occupation is presented in the related class. On-the-job training is an integral part of each program.

In post-secondary education, specialized instructional programs in the area of Food Service Administration and Mid-Management are offered at several community colleges in Arizona. In these programs, in-depth instruction is provided in food production, purchasing, serving and cost analysis; merchandising; accounting; maintenance; supervision; front office procedures; and safety and sanitation.

Programs leading to a Bachelor's or Master's Degree in Business or Home Economics with emphasis in the hospitality area are available at the college and university level. Courses in quantity food production, institutional food service and purchasing, equipment, management and marketing are available.

Manufacturing & Transportation

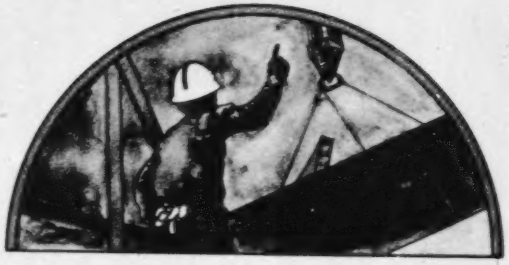
Whereas Career Education provides students with an opportunity to explore and assess their interests and abilities with respect to the world of work, Vocational Education provides students with the opportunity to develop the entry skills, knowledges and general occupational competencies required in their selected job area. In addition, "pride and craftsmanship" and "dignity of labor" take on new meaning as personal and social responsibility are acquired. For those students who choose manufacturing or transportation occupations, Vocational Education provides a wide range of options both in the schools and in cooperation with industry.

Numerous examples of reality-oriented projects are being implemented in high schools throughout the state. In one school, students remodel buildings and auction them to the highest bidder under the direction of trade-experienced teachers, cooperating contractors, and labor representatives. In another school students are building an airplane under the guidance of licensed mechanic instructors. In still another school students mix, pour, and finish concrete; learn structural welding, carpentry and house wiring. Many schools provide a wide range of practical experiences in automotives ranging from wheel alignment to engine overhaul. Cooperative industrial education programs provide practical experiences with pay and school credit toward graduation.

Thus, Vocational Education furthers the Career Education goals of "learning to live" and "learning to learn" and brings to fruition the "learning to make a living" portion of the total Career Education picture.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION



Communications

Communications occupations are evolving at an accelerated pace and the rapid technological changes now taking place have caused many new communications jobs to emerge.

Basic communications skills start at an early age in our school system where students learn listening, speaking, reading, composition and literature. With the basic communication skills developed in English classes, students are then ready to develop specific communications skills and knowledge in a variety of pre-vocational and vocational programs.

Communications occupations can be grouped into two broad areas: (1) visual communications, and (2) electronics communications. In the schools, a complete program in communications will provide opportunities in four areas: communication using light sensitive materials, communication through electronic processes, communication using printed materials, and communications through drawing.

At the present time, very few junior high schools provide pre-vocational exploratory experiences in the communications occupations. Most of the communications offerings at the 7th and 8th grade level are in the form of mechanical drawing with limited experiences in electronics.

The American Industry Project, an innovative industrial arts program which utilizes the conceptual approach, gives considerable attention to communications, since it is one of the fourteen concepts the students study in the program.

Exposure to the communications occupations really comes to life in the 9th and 10th grades where in-depth exploratory experiences in graphic arts, electronics and drafting are offered to many students.

Vocational programs in commercial art, drafting, electronics, photography, and printing are offered at the 11th and 12th grades, and at this level the emphasis is on career preparation.

Electronics is offered in most of the larger high schools and in 10 of the 11 community colleges. The climatic conditions in Arizona are ideal for the electronic industry which is making a significant contribution to the economy of the state.

Construction

Each year billions of dollars worth of construction go undone in this country because of the acute shortage of trained craftsmen.

Arizona, one of the fastest growing states in the nation, needs to expand its educational programs in the occupational cluster of construction to meet the projected needs of the state for construction workers. Construction programs in Arizona are offered as pre-Vocational Education, trade and industrial education, and technical education.

The major pre-Vocational Education program being offered is the Industrial Arts Curriculum Project (I.A.C.P.) "World of Construction," designed for the 7th or 8th grade level. This innovative program provides students an opportunity to explore all aspects of construction as it relates to personnel, management, and production.

At the 9th or 10th grade, students are provided opportunities for in-depth exploration of construction. Interest developed in the "World of Construction" programs are further developed. At these grade levels, many students find architecture, the building trades, or some other area of construction an important phase of their education.

The trade and industrial education programs are concerned with career preparation. The primary objective is for students to develop saleable skills in broad construction areas or a specific construction trade.

While the building trades is a popular choice for many students, some find a specific trade such as carpentry, masonry, electrical or plumbing more interesting. Whatever their interest in the occupational cluster of construction, students can pursue that interest and develop saleable skills during the 11th and 12th grades.

Technical education programs offered at the post-secondary level prepare technicians in the area of civil technology and design technology which are making a significant contribution to the construction industry. Most of the community and junior colleges in Arizona are providing technical education in construction or related fields.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION

Business & Office

Business and Office Education prepares individuals to provide needed services for the business world. Its purpose is to make students proficient in various techniques and procedures used in the modern office, to include automation, operational systems, data processing, and the coordination of communications information.

Learning experiences are designed to lead to employment and/or advancement of individuals in occupations in public or private enterprises/or organizations related to the facilitation function of the office. Facilities function refers to the role played by office occupations as the connecting link between the production and distribution activities of an organization.

Included are a variety of activities, such as recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and the reporting of information.

The high school student interested in an office occupation is assisted in developing skills, attitudes, and information necessary to acquire a beginning position in an office occupation. Instruction is provided in communications, proper utilization of office equipment, financial activities of a business, records management of supplies, correct use of transportation services, proper management of supplies, correct use of information sources, terminology and understanding of data processing procedures, and job application procedures.

The course content relates to the types of situations that students will face in the working world. Office Education serves as a connecting link between school and business, through the use of actual business practices and procedures.

Health

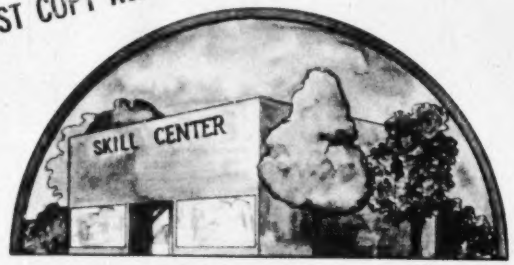
Great strides in medical research and related technologies, extension of hospital and health insurance and the expansion of a more health conscious population, along with higher per capita income, have made health services one of the fastest growing sectors of the American economy. As a result, chronic shortages of medical and health personnel have been intensified despite the training of new health personnel, which has not proceeded fast enough.

There are nearly 400 health occupations categories toward which elementary, high school and college students may channel their interests. In 1972 close to 5 million persons were employed in health professions and occupations in the United States (37,000 in Arizona).

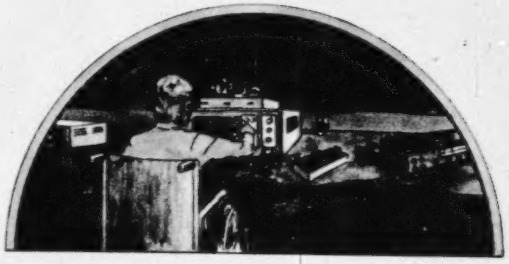
In order to keep pace with the growing demand for trained, qualified health personnel, nine Arizona high school districts, all the community colleges and the three universities are providing training in a broad spectrum of health occupations. Such programs range from those that simply relate to a study of health careers to those that provide preparatory training in a number of occupations such as nurse assisting, licensed practical nursing, degree nursing (the RN program), medical technologies of many types, dental hygiene, mental health, medicine and a large number of other specialties.

By the beginning of the 1973-74 school year, it is estimated that approximately 8,000 students will be enrolled in some type of health occupations program in an Arizona high school, college or university. Even heavy enrollments and larger graduating classes may still not meet the demand for trained health occupations personnel.

BEST COPY AVAILABLE



VOCATIONAL EDUCATION



Manpower Development

The Manpower Development and Training Act of 1972 provides for training and retraining of family heads displaced by economic and technological change, as well as for unemployed and under-employed persons. Skill training is offered in occupations where there is a reasonable opportunity for job placement upon completion of training. Programs are established in a wide variety of occupational training.

Persons over 16 interested in skill training can contact the State Employment Service for information on occupations and individual aptitude testing before entering occupational training. An individual employability plan is worked out through cooperation of the training applicant, the employment service, and the training center. Manpower Training and Development (MDTA) classes are conducted in specified career centers, community colleges, high schools, hospitals, and private schools.

MDTA classes can begin and end at any time the individuals involved are ready (open entry-open exit concept). They are provided skill training and related instruction to meet individual needs, and as they develop entry level proficiency in a chosen occupation, provision is made for placement in a job. This is the goal of MDTA training.

Advisory committees, composed of employers and representatives from business and industry, meet regularly with agency representatives, school administrators, instructors, and trainees, to give advice on what needs to be learned for various occupations and how to become successful on a job. Many MDTA trainees have family and personal problems that affect training and job placement. Counseling and various social services are available during skill training to help individual trainees adjust to the world of work.

Skill training offered in Arizona includes automotive, barbering, broadcast arts, cartographic engraving, cashier-sales, clerical, construction, cosmetology, culinary, drafting, electronic technology, health occupations, machine operator, meat cutter, optic mechanic, radio and TV repair services, range management, veterinarian aide, refrigeration, utilities service, welding, water and waste technology.

Special Needs

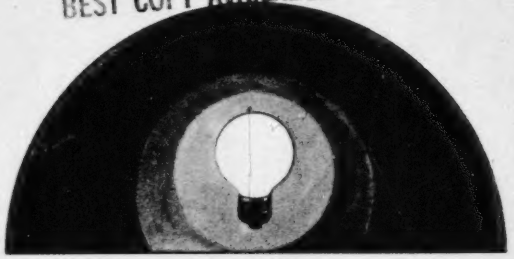
Annie's husband deserted her, leaving her with six children to raise. With no skills to obtain a job, and no money for food, Annie turned to welfare. Today Annie is self-supporting and working full-time as a practical nurse. Annie says: "That vocational program taught me to believe in a dream, and to believe in myself. They offered me nurse's training. Today my dreams are coming true. I have my own little house, a yard big enough for my kids and a little garden. I even have a car; it's not new but it gets me to a job that I really enjoy."

Joe; husband, father, auto mechanic, and ex-con. Joe's boss says: "He's the best. He's a steady worker, been with us a year now. He started here right after he came out of prison. He sure had good mechanic's training in that vocational class they have in the prison. Guess they teach them how to get along with people too - - customers like him."

These are just two examples of the thousands of disadvantaged and handicapped people, (so-called unemployable) who are learning skills leading to gainful employment in Arizona's businesses and industries. Special needs programs in high schools, community colleges, skill centers, and institutions are conducted year round. Classes may be held during day or evening hours where the disadvantaged and handicapped are. Individualized instruction is available to allow each student to develop at his own rate of learning. Special needs services vocational programs help people to help themselves.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION



Cooperative Education

Every Arizona student will, at some point during his formal educational experience, have the opportunity to participate in the "real world of work" by taking part in a "work education program"—found throughout the state in junior and senior high schools, community colleges, and universities.

Career Education has made it possible for 7th and 8th graders to enjoy the benefits of actual work experience through a planned program of "work exposure." This allows the junior high student to visit job sites during school hours in order to become familiar with several occupations, first-hand.

High school students can take advantage of a "work experience" program which will enable them to work at an actual job site, or they may enter a "cooperative education" program. Co-op (as it is commonly called) is oriented towards a student's expressed career interest, and involves a cooperative planned effort between the student, the school, and the employer.

In most cooperative education programs, students attend classes at school during part of the day and then work at a part-time job (for pay) during another part of the day. The job is carefully monitored by the employer as well as the student's teacher-coordinator, and the student attends a class that relates to his part-time job.

The community colleges are becoming increasingly active in cooperative education. A technique within a collegiate curriculum is the internship program. This co-op concept allows the student to apply the concepts and skills he has learned in the college classroom as a culminating experience prior to graduation.

Work education programs, as exemplified by the "co-op" method, are bridging the gap between the classroom and the world of work. The community itself becomes a classroom and thousands of students in Arizona are getting turned on to education and tuned in to life.

Needless to say, the growth of these programs (from a modest 55 in 1968 to more than 300 today) represents a genuine spirit of cooperation from the entire community—a spirit that is becoming increasingly vital for meaningful education in the 1970's and beyond.

Exemplary Programs

Exemplary programs are designed to break away from traditional practice and develop creative ways of meeting the needs of individuals preparing for their careers. A primary objective is to apply the findings of research in using new approaches. The long-range goal of exemplary programs is to provide models for all future Vocational Education programs.

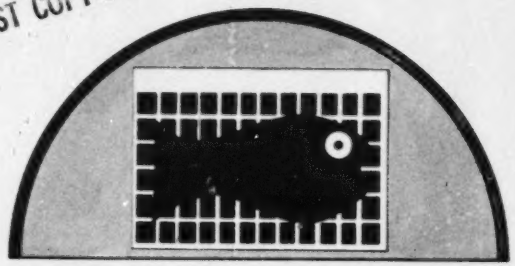
Special attention is given to developing more effective programs for non-college bound youth and more particularly to those having handicaps of a social, economic or educational nature. Effort is directed toward discovering new ways to create a bridge between school and work for those who are in high school, those who have left school through graduation or dropping out, or those who are in community colleges.

Examples of the kinds of programs that are considered exemplary include: (a) those designed to acquaint elementary and secondary school students with the broad range of occupations, (b) summer work programs involving educational experiences, (c) intensive occupational guidance or counseling during the last years of school and for initial job placement, (d) curriculum projects aimed at broadening Vocational Education, (e) exchanges of personnel between schools and other agencies, including business and industry, (f) programs designed to motivate students to higher achievement, and (g) programs designed to prepare potential Vocational Education teachers.

Exemplary programs compare with the research activities in business and industry through which there is a continuing improvement in the quality of the product or services.

BEST COPY AVAILABLE

VOCATIONAL EDUCATION



Research Coordinating Unit

The purpose of the Arizona Research Coordinating Unit (RCU) is to help bring about desirable change in Vocational-Technical Education and Career Education in schools. This will help to make quality vocational programs available to all who need and can profit by them.

In order to accomplish this task, the RCU functions in disseminating, stimulating, and coordinating educational research and assisting in the evaluation of Vocational-Technical Education programs. Two services are provided to Arizona educators: the Arizona RCU Information Service and the Arizona Career Education Clearinghouse. Both of these services gather and collect educational materials and then share them with educators throughout the state who can put them to practical use.

The RCU Information Service is linked into a national information system from the U.S. Office of Education that provides a constant flow of innovative ideas from across the country. A comprehensive research service is provided upon request to any educator on any level in the state.

The Arizona Career Education Clearinghouse collects, evaluates, and distributes the products of all state-funded Career Education projects. This allows each of the projects to profit by the work already accomplished by the other projects. The Clearinghouse also has a collection of Career Education materials from other states and has created a classification system and bibliography to provide access to these materials.

To encourage innovation in Arizona Vocational-Technical Education and Career Education, the RCU provides research mini-grants. School districts, community college districts, colleges, universities, and other public or non-private agencies in Arizona are eligible to apply for grants to conduct research projects. These grants may range from $500 to $10,000. The projects must be directly related to improving the quality of, or extending the opportunity for, Vocational and/or Career Education available to youth and adults.

To assist the Division of Vocational Education in evaluating the effectiveness of the Vocational-Technical programs in secondary and post-secondary educational institutions, the RCU also serves as a data collection agency. A survey is completed each year which gathers the statistics on the number of students enrolled in vocational classes and a follow-up is conducted to determine how the graduates from these classes have used their vocational training. These figures are used to meet Federal regulations and to assess current needs for change and improvement in Vocational–Technical education in Arizona schools.

Work Study Programs

The Vocational Education work-study program is designed to provide part-time employment for young people who need earnings in order to begin or continue Vocational Education on a full-time basis. Funds are made available only to those who (a) have been accepted for enrollment in approved Vocational Education programs, (b) have a genuine need for these earnings, and (c) are between the ages of 15 and 21 years.

Work-study students are limited in the number of hours they may work each week, but the limitation does not apply to summer employment if classes in which they have enrolled are not yet in session. The students are also limited in how much they can earn each month and each academic year, except during non-school periods such as the summer.

Among the features of work-study programs is that students are employed through their school districts. This makes it possible for them to be assigned to duties related to their Vocational Education programs and to be supervised by their teachers.

Professional Development

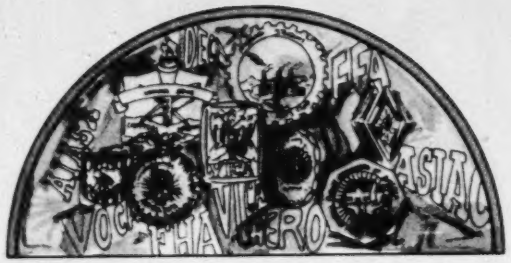
Professional development has to do with those activities designed to prepare and upgrade Vocational Education professional personnel. The major thrust of professional development activities is in the areas of teacher education and curriculum development.

The goals of the state program of vocational professional development focus around the areas of comprehensive planning, coordination among occupational service areas, coordination with the total state program of Vocational Education, supplying personnel demands, acquiring needed occupational skills, program accessibility, research, instructional materials, and program evaluation.

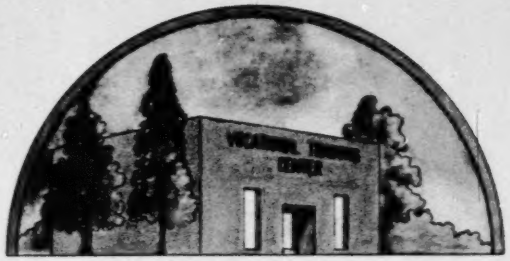
All occupational service and special program areas offer in-service activities for the further development of Vocational Education personnel. These projects may be offered through a local school or community college district, university, or Arizona Department of Education.

The ultimate outcome of professional development is to provide an adequate number of highly competent Vocational Education personnel. This requires coordination and planning with all institutions and agencies, occupational cluster and special program areas. It also requires close coordination as an integral part of Career and Vocational Education.

BEST COPY AVAILABLE



VOCATIONAL EDUCATION



Youth Organizations

Youth need opportunities to develop motivation, respect for their capabilities, understanding of their future economic role, civic awareness and recognition of personal leadership potential. To satisfy this need, youth groups have been established as an integral segment of the total Vocational Education plan.

Arizona students seeking competency in the various occupational areas currently have the opportunity to participate in the following youth organizations: Distributive Education Clubs of America (DECA), Future Farmers of America (FFA), Future Homemakers of America (FHA and HERO-FHA), Vocational Industrial Clubs of America (VICA), Vocational Office Chapters of Arizona (VOCA), and Arizona Industrial Arts Student Association (AIASA). A variety of activities are available to foster a spirit of competition and provide recognition for achievement in both skill and personal development.

The most prevalent concept common to all the youth organizations is the development of the "whole student" . . . his social and leadership abilities as well as his occupational skills . . . and preparation to be a contributing member of our free competitive enterprise system. Poise, confidence, the ability to meet and work with people, quality workmanship, respect for the dignity of work, scholarship, character development, improvement of family living, citizenship, and patriotism are concerns of the organizations.

Career identification, selection, preparation and pursuit are important aspects of the youth groups. The organizations bring together thousands of Arizona youth . . . male and female . . . from the urban and the rural . . . who have developed a unified interest in related occupations.

These youth organizations join with Vocational Education instructional programs in bridging the gap between going to school and going out into the real working world.

Area Vocational Centers

The Arizona Department of Education makes it possible for students to obtain Vocational Education through programs located outside of their regular school districts when these programs are not available locally. This type of arrangement is called "area vocational education."

Any high school district can serve as an area vocational center if it provides a Vocational Education program that is approved by the Division of Vocational Education. In addition, all Arizona community colleges have been designated as area vocational schools. High school and community college students from other districts may enroll in these community colleges if all necessary arrangements can be made. In some cases, high school students can receive college credit in these programs.

When high school students wish to enroll in Vocational Education programs in neighboring high school districts, arrangements are made between the districts for the payment of out-of-district tuition.

The basic concept is to make Vocational Education available to all students regardless of their place of residence. In addition it helps school districts make maximum use of the teachers, equipment and facilities available for Vocational Education.

A Rationale For The Career Education Concept

BEST COPY AVAILABLE

By Dr. William F. Pierce
Deputy Commissioner for Occupational & Adult Education
U. S. Office of Education

Two conversations involving "Career Education"—one with the president of a college in one of the Mountain States, the other with our babysitter—brought home to me recently the widespread interest this concept has generated and the need to move forward with implementing it.

The college president telephoned the Office of Education to say he needed advice. "You people have been talking a good deal about Career Education," he said, "so I assume you are experts. We're worrying about getting our graduating seniors placed. The mining engineering students probably won't have any problem, but what are we going to do with the history and English majors?"

A good question, and one that was puzzling the babysitter, too. She herself was an English major, she told my wife and me one evening, and was completing her preparation as a high school teacher, only to find that there were no openings and no prospects for openings. "Maybe it's my own fault," she said, "but I can't help feeling bitter. I did everything they told me to do—completed all the requirements and more. Maybe I'm better off for knowing something about Chaucer and the Lake Poets and the rest, but so far as making a living is concerned I can't help feeling that I have wasted my time."

There is of course no advice to offer that will solve the college president's problem or comfort the babysitter. The resolution of their dilemma—a dilemma they share with hundreds of thousands of students and with school and college administrators throughout the Nation—would have had to have started 15 or 20 years earlier.

Perhaps the saddest aspect of the situation—the waste of time and talent that goes with letting young people leave school unprepared to find their place in the sun—is that it is so general as to be commonplace. As an estimate, based on a good deal of thought and experience, I would suggest that something in the order of 60 percent of what youngsters are taught in school could profitably be discarded on grounds that it provides them neither with job skills nor with the "coping" skills that enable people to lead satisfying, self-confident lives.

This in essence is what the Career Education approach is all about: to reform and refocus education so that what is taught in the classroom has a clear, demonstrable bearing on the student's future plans—whether these plans be to find a job immediately, to go on to college or graduate school or some other form of advanced training, or to enter the world of work for a time and then return to education, and in any case to enable the student to go forward secure in the knowledge that he or she is prepared to deal with the world on its own terms.

Reform of this nature has two basic aspects. The first is that students must acquire an understanding of the options open to them. Beginning at an early age, they must learn what work means, the range of careers open to young Americans today, and the kinds of careers that may emerge in the future; they must learn the special obligations and requirements of careers that capture their interest, and as they progress in school they must be enabled to acquire specific skills—by which I do not have in mind just mechanical skills but the fundamental academic skills as well. And perhaps as part of the overall process, they can come to see that getting a job after high school rather than going to college is a perfectly reasonable thing to do and that the stigma that some people seem to attach to settling down as a TV repairman or a teletype operator or a postal worker or whatever, represents a superficial and phony sense of values.

The second aspect of this search for educational renewal has to do with the role of teachers and the preparation they receive at our teacher training institutions. Teachers obviously must have a thorough knowledge of a particular discipline—mathematics, geography, chemistry, or whatever—but they must also keep first things first. And first things tend to get relegated to second or third when a teacher becomes a compulsive advocate of a particular discipline or personal enthusiasm, determined that his or her students will share that obsession. The teacher's fundamental obligation, it seems to be, is not simply to regurgitate expertise. The obligation is to prepare students to function in society at their maximum potential, and that means putting students ahead of the teacher's commitment to a special branch of learning. Teachers do not have the right to impose their values on students, to presume that because they are fascinated by calculus or clay modeling, their students automatically must be so, too.

Probably there is not a teacher in the country who at one time or another had not had a student plaintively ask, "Why do I have to study this particular subject?" To which the too-frequent answer is something to the effect that the youngsters will need the knowledge "later on." Well, maybe. But maybe not, too. In all likelihood the teacher hasn't really tried to figure out what the student will need later on, or for that matter right now.

Moreover, by failing to concede that perhaps the student has a point and to readjust the curriculum and the method of presenting it so as to appeal to the student's interests and aspirations, the teacher enormously increases his or her own chances of failure. Making such a switch may require some thought and planning and perhaps some ingenuity, but it does not call for wizzardry. Teachers and curriculum planners in many parts of the Nation are in fact well along in making such a change. Courses are being organized in terms of broad career clusters. Arithmetic is being presented not as a puzzle to be solved for solving's sake, but as a handy skill of direct usefulness now and later on in just about any calling a youngster can choose.

English is being taught not as an abstract intellectual exercise to be studied for no better reason than because it is a hurdle that must be surmounted, but as a practical tool of communication with rewards no less for the clerical worker or carpenter than for the artist or architect. There is no competent teacher anywhere, it seems to me, who could not re-examine and redefine his or her program toward two ends: First, that it deal only with matters that the youngsters will really need as functioning members of the society; and second, that it be presented in a manner that they can see as being relevant and useful, and thus interesting. Given that kind of approach, students are not going to be asking why they have to study a particular subject. They will want to study it because it relates importantly to their interests and ambitions.

One curious aspect about the increasing attention the Career Education concept is attracting is that some people seem to equate it with an attack on the arts and humanities. That is simply not so. Such an inference assumes that "Career Education" is simply another way of saying "Vocational Education," with the latter being defined as training for certain mechanical (and by implication inferior) skills. Career Education does indeed embrace Vocational Education, insofar as students make well-informed judgments that certain kinds of vocational or technical training fit in with their career plans, but it extends equally to the "hard" and "soft" sciences and to the arts and humanities. Career Education DOES present a challenge, to all categories of learning and to all disciplines: Please tell us, it says, why the student should acquire the particular information you have to impart. Specify, in precise terms, how the youngster can put that information to use, how it relates to his life, now and after he leaves the classroom. And try to arrange things, please, so that your personal commitment to sonnets or Byzantine art or the binomial theorem does not become the all-inclusive standard of the student's learning experience.

Once upon a time, and not so long ago at that, it was assumed without question that no man could be considered well educated (women were excepted, a blessing they may or may not have appreciated) unless he had a solid grounding in Latin and Greek. Latin and Greek still have their uses for people pursuing certain kinds of careers, but few would argue today that these languages are quintessential of a high school or college curriculum worth its salt. The fact of the matter is that knowledge is increasing at such an incredible rate—doubling every three months, I heard someone say recently—that it simply isn't possible for any student to learn everything there is to know.

So far as the arts and humanities are concerned, it would seem to me reasonable to suggest that every student should indeed receive a basic and well-calculated exposure to these branches of learning—not because he or she will be better off "later on," however, but as part of a general strategy for helping students to understand what the various arts and humanities disciplines involve and, on that basis and on the basis of what they have learned of other disciplines and other career options, to decide whether to take up one of them as a lifelong pursuit. Such a procedure calls upon teachers to sincerely hold themselves accountable—to analyze their subject matter in terms of what most students truly need in order to function effectively as members of the community, to discard what is irrelevant to that purpose, and to present their material in a manner that helps the individual perceive its vitality and relevance.

Particular students will of course decide that they want to dig deeper—that what they learned in the unit on careers in communications was so interesting that they would like to consider the possibilities of becoming a movie script writer or a disc jockey. Some might want to become English teachers. Excellent—if that is their decision, made with full knowledge of the range of career opportunities available and the condition of the job market, and based on their own excitement for grammar or literature, and not a decision that has been imposed by someone else.

In short, the Career Education concept boils down to an attitude—a mind set. It is a way of thinking, a point of view which holds that learning cannot be seen as an abstraction, divorced from the realities of life, and that the commitment must be to the learner. The student's interests, goals, and abilities come first. The Career Education concept is thus so big and broad that it would be both presumptuous and impractical for any national entity—the Education Division of the U.S. Department of Health, Education, and Welfare or any other—to spell out detailed specifications binding on every school and college. The Division's role in this matter together with those of the Office of Education and the National Institute of Education is to serve as a catalyst, calling attention to a promising new approach to education and supporting particular activities that will help the States and local school districts develop and refine their own plans and strategies. Reports from all sections of the Nation indicate that the concept has struck a spark and that the move to apply it is gathering momentum. It seems clear that many people had become uneasy about the existing education system and were seeking a vehicle by which to bring about constructive change and set education on a new course. The Career Education concept has provided that vehicle.

Career Education is nevertheless no magic potion. It is not going to open doors for college students receiving their A.B. degrees this June or for youngsters getting their high school diplomas. Given the increasing interest in the concept, however, and in the spirit and point of view that lies behind it, we can hope that the day is not too distant when no student will leave the classroom with the feeling that he has simply been cast adrift. Perhaps at that time a nascent English teacher will not wonder, as our babysitter did, why in the world she had been required to learn where Russia's principal minerals are to be found.

(Reprinted from the April 1973 edition of AMERICAN EDUCATION)